

**BAY**

**A COMMUNITY COLLEGE**

**CITY**

**1957**

**1959**

**JUNIOR**

**COLLEGE**



# BAY CITY JUNIOR COLLEGE

## CATALOGUE

1957 - 1959

A Community College  
Fully Accredited by the  
North Central Association  
of Colleges and Secondary Schools  
and  
The Michigan Commission on  
College Accreditation

Authorized and Controlled by the Bay City Board of Education

Bay City, Michigan



## COLLEGE CALENDAR

1957-'58

Aug. 27, 28  
 Aug. 26-Sept. 6  
 Sept. 3-5  
 Sept. 3, 7:30 p.m.  
 Sept. 5, 6  
 Sept. 9, 10  
 Sept. 9  
 Sept. 11  
 Nov. 8  
 Nov. 11  
 Nov 28-Dec. 1  
 Dec. 2  
 Dec. 13  
 Dec. 20  
 Jan. 2  
 Jan.-13 17  
 Jan. 13-24  
 Jan. 21  
 Jan. 25  
 Jan. 27-29  
 Jan. 27  
 Jan. 30  
 March 28  
 March 31  
 April 4-13  
 April 14  
 May 22  
 May 23-29  
 June 1  
 June 6  
 June 10, 11  
 June 16  
 July 25

Placement examinations for new students Aug. 26, 27  
 Registration, Evening College Aug. 25-Sept. 5  
 Faculty Conference Sept 2-4  
 Conference with new students and parents Sept. 2, 7:30 p.m.

Registration, Sophomores Sept 4, 5  
 Registration, Freshmen Sept 8, 9  
 Classes convene, Evening College Sept. 8  
 Classes convene, Day College Sept. 10  
 Mid-Semester Nov 7  
 Mid-Semester Grades due in Registrar's Office Nov. 10  
 Thanksgiving Holiday Nov 27-30  
 Classes resume Dec. 1  
 Christmas Holiday for Students begins Dec. 17  
 Christmas Holiday for faculty begins Dec. 24  
 Classes resume Jan. 5  
 Semester examinations Jan. 14-21  
 Registration, Evening College Jan. 19-30  
 Placement examinations for new students Jan. 22  
 First semester ends Jan. 27  
 Registration for second semester Jan. 28-30  
 Classes convene, Evening College Feb. 2  
 Classes convene, Day College Feb. 2  
 Mid-Semester Mar 20  
 Mid-Semester Grades due in Registrar's Office Mar 27  
 Spring Vacation March 27-April 4  
 Day and Evening Colleges  
 Classes resume April 6  
 Honors Convocation May 28  
 Semester examinations May 25-29  
 Baccalaureate May 31  
 Commencement June 5  
 Placement examinations for new students June 8  
 Summer Session begins June 15  
 Summer Session ends July 24

1958-'59

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## BAY CITY BOARD OF EDUCATION

William J. Anderson

Russell F. Beck

S. Dillon Foss

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G. J. (Fred) Van Haaren

### ADMINISTRATION

Elwyn J. Bodley  
Superintendent of Schools

L. J. McCully  
Business Manager—Board of Education

Lyle Ewing  
Secretary—Board of Education

Eric J. Bradner  
Dean of Junior College

### ADMINISTRATIVE STAFF

Bradner, Eric J.

Dean

Thorsberg, Walter E.

Registrar

Kern, Palmer

Dean of Men

Waterman, Lois L.

Dean of Women

Stuart, Robert M.

Director, Dept. of Continuing Education

Van Wezel, Henry J.

Director, Dept. of Vocational Education



## FACULTY

- BRADNER, ERIC J.** . . . . . Dean, Principal of Bay County Normal School  
A.B., Occidental College; M.A., Ph.D., Northwestern University. Additional graduate work: University of Southern California and Stanford University.
- ADAMS, LORNE P** . . . . . Physiology  
A.B., M.A., University of Michigan. Additional graduate work: University of Michigan.
- ALLEN, WILLIAM S., JR.** . . . . . History  
A.B., University of Michigan; M.A., University of Connecticut. Additional graduate work: University of Michigan; Free University of Berlin and University of Goettingen, Germany.
- BRINN, JOHN H.** . . . . . Chemistry, Mathematics  
B.S., Ed. M., Murray State College. Additional graduate work: Vanderbilt University.
- CADY, LOREN** . . . . . Music  
A.A., Bay City Junior College; B. Mus., Oberlin College; M. Mus., University of Michigan.
- CASTILLO, CHARLES W** . . . . . Speech  
A.B., M.A., University of Redlands. Additional graduate work: University of Colorado.
- CONWAY, LYNN V** . . . . . Physical Education, Basketball Coach  
B.S., Michigan State University. Additional graduate work: Michigan State University and University of Michigan.
- DEVOL, LLOYD E.** . . . . . Economics  
A.B., M.A., Ohio State University. Additional graduate work: University of Michigan.
- DOLL, LOUIS W** . . . . . History  
A.B., M.A., Ph.D., A.B.L.S., University of Michigan; Ph.D. (Honorary), Nihon University, Tokyo. Additional graduate work: Army Intensive Japanese Language School; Military Intelligence Service Language School.
- DRAKE, NED E.** . . . . . English  
B.S., M.A., University of Southern California. Additional graduate work: University of Vienna, Austria.
- EVANS, H. R.** . . . . . Music  
B. Mus., University of Michigan; M. Mus., Alma College.
- EWING, META M.** . . . . . Mathematics  
B.S., M.S., Michigan State University. Additional graduate work: Michigan State University and University of Chicago.
- FORTNEY, HAROLD B.** . . . . . Political Science, History  
A.B., Fairmont State Teachers College; M.A., West Virginia University. Additional graduate work: University of Wisconsin and Ohio State University.
- FREED, SAMUEL J.** . . . . . Physics  
B.S., Northern Michigan College of Education; M.S., University of Michigan.
- GAITSKILL, LAWRENCE R.** . . . . . Political Science, History  
A.B., M.A., University of Kentucky. Additional graduate work: Alliance-Francaise, Paris, and University of Strasbourg, France.
- HASLIP, FLORENCE** . . . . . Education  
B.S., Central Michigan College of Education; M.A., University of Michigan.

- HELLMUTH, ERMA J. German, Spanish  
A.B., M.A., University of Michigan. Additional graduate work: Centro de Estudios, Madrid; Centro de Estudios, Mexico; Diploma of Suficiencia, Centro de Estudios Historicos, Madrid.
- HOFFMAN, MARILYN M. (Mrs.) Physical Education  
A.B., Michigan State University.
- KERN, PALMER B. Economics, Director of Athletics, Dean of Men  
Life Certificate, Central Michigan College; A.B., B.S., Western Michigan University. Additional graduate work: Michigan State University and Akron University.
- KESSLER, LIBBIE Librarian  
A.A., Bay City Junior College; A.B., University of Michigan; B.L.S., University of Illinois.
- KLINGBEIL, GLADYS M. (Mrs.) History  
A.B., Aberystwyth College, University of Wales; M.A., University of Michigan. Additional graduate work: University of Michigan and University of Wisconsin.
- LAGDEN, OLIVE L. French  
A.A., Bay City Junior College; A.B., M.A., University of Michigan. Additional graduate work: Boston University; Western Reserve University-French School; Middlebury College-French School.
- LANGSCHWAGER, LYLE M. Geography  
A.B., Central Michigan College; M.A., University of Michigan.
- LEESON, MARJORIE M. (Mrs.) Accounting  
B.S., Western Michigan University; M.A., University of Michigan.
- LYNCH, ALINE A. Business  
B.S., Western Michigan University; M.A., University of Michigan. Three-year certificate, American Savings and Loan Institute, Chicago. Additional graduate work: University of Wisconsin and University of Michigan.
- LYNCH, JAMES J. Philosophy, English  
B.S., M.S., Indiana State. Additional graduate work: Indiana University.
- McNALLY, EDWARD V. English, Assistant Basketball Coach  
A.B., Seton Hall University; M. A., University of Minnesota.
- MERRITT, MERRILL M. Chemistry, Physics  
B.S., Seattle University; M.S., University of Oregon. Additional graduate work: University of Oregon Dental School; Portland State College; Third Chemistry Institute-Montana State College.
- NORRIS, KENNETH Swimming Coach  
B.S., Central Michigan College; M.S., Columbia University, New York.
- OMANS, MARGARET B. (Mrs.) English  
A.B., M.A., University of Michigan. Additional graduate work: Columbia University.
- PARKS, HARRY G. Political Science  
A.B., Eastern Michigan College; M.A., Colorado State College; M.A., University of Michigan; M.S. in Education, Ed.D., Indiana University. Additional graduate work: Wayne University, Boston University, Denver University, University of Arkansas. Graduate Army Administrative School.
- PEASE, GEORGE O. Drafting  
B.S., M.S., Stout State College.
- PHILLIPS, VELMA A. (Mrs.) Nursing  
R.N., Saginaw General Hospital; B.S., Eastern Michigan College; M.T (A.S.C.P.), Saginaw General Hospital.



- PLUM, KATHLEEN B. (Mrs.)** Art  
B.S., University of Wisconsin. Graduate work: École Russe d'Art Applique, Paris; Fontainebleau School of Fine Arts, Fontainebleau, France; University of Wisconsin; Columbia University; University of Michigan; Michigan State University; Tyler School of Fine Arts, Temple University.
- ROYAL, ADA I.** Psychology  
B.S., Eastern Michigan College; M.A., University of Chicago. Additional graduate work: University of Michigan, Columbia University, and University of Southern California.
- RYAN, WILLIAM A., Jr.** Geology, Cross Country and Track Coach  
A.B., Miami University; M.A., University of Missouri. Additional graduate work: University of Illinois, Washington University and University of Michigan.
- SCHWARTZ, ARNOLD A.** Drawing  
A.S., Bay City Junior College; B.S.F., M.F., University of Michigan. Additional graduate work: University of Washington.
- SIEHR, HUGO E.** Mathematics  
B.S., University of Wisconsin; M.E., Marquette University. Additional graduate work: Michigan State University.
- SMITH, EARL W.** English  
A.B., M.A., Ed.D., University of Michigan.
- STRY, EDWARD J.** Chemistry Tennis Coach  
A.B., Canisius College; Ed.M., University of Buffalo. Additional graduate work: University of Buffalo and University of North Carolina.
- STUART, ROBERT M.** Director, Dept. of Continuing Education  
A.B., Central Michigan College; M. A., University of Michigan. Additional graduate work: University of Michigan.
- THORSBERG, WALTER E.** Registrar, Mathematics  
A.B., M.Ed., University of Michigan.
- van BENSCHOTEN, VIRGINIA K. (Mrs.)** English  
A.B., Eastern Michigan College; M.A., Wayne State University; L.L.B., University of Wyoming. Additional graduate work: University of Michigan.
- WAGNER, JOHN A.** Zoology, Botany  
B.S., Southern University; M.S., Duquesne University. Additional graduate work: Wiley College, University of Pittsburgh, and University of Chicago.
- WALKER, DOROTHY S. (Mrs.)** Director of Practical Nursing  
R.N., Saginaw General Hospital. Additional work: Central Michigan College, Wayne University.
- WATERMAN, LOIS L.** English, Dean of Women  
A.B., M.A., University of Michigan. Additional graduate work: University of Michigan; University of Wisconsin; Columbia University; and Workshop for Curriculum and Counseling, Denver, Colorado.
- WILLIAMS, FRED J.** Chemistry  
B.S., Michigan State University; M.A., University of Michigan. Additional graduate work: University of Chicago and Montana State College.
- WILSON, GEORGE** Education, Sociology  
A.B., M.A., Michigan State University. Additional graduate work: Michigan State University and University of Michigan.
- WILSON, ZANE A.** Mathematics  
A.B., Otterbein College; M.A., Ohio State University.
- WOODFORD, MARION L.** Chemistry  
B.S., Central Michigan College; M.A., Michigan State University. Additional graduate work: Michigan State University.

## FACULTY EMERITUS of Bay City Junior College

Butterfield, George E. (1926-1949)	. . . . .	Dean
French, Gordon (1928-1956)	. . . . .	Economics
George, J. H. (1923-1953)	. . . . .	Geology
Hobbs, Ada E. (1931-1950)	. . . . .	English
Howe, Alice A. (1927-1945)	. . . . .	Chemistry
Klingbeil, Henry C. (1926-1957)	. . . . .	Speech
McGregor, Nellie May (1926-1954)	. . . . .	English
Martin, G. L. (1922-1945)	. . . . .	Chemistry
Presley, Florence (Mrs.) (1935-1950)	. . . . .	Library
Rogers, Fred B. (1923-1954)	. . . . .	Physics
Schroeder, Mathilda M. (1922-1945)	. . . . .	German, English
Whitney, Lola Bishop (Mrs.) (1930-1949)	. . . . .	French

## SECRETARIAL STAFF

Ceglarek, Frances E. (Mrs.)	. . . . .	Secretary to the Registrar
Jarvis, Thelma (Mrs.)	. . . . .	Clerical Assistant
Lauria, Lila M.	. . . . .	Secretary to the Dean
Rugenstein, Lorraine	. . . . .	Secretary, Dept. of Continuing Education
Siebrasse, Cordean	. . . . .	Secretary, Library
Zwetzig, Theora (Mrs.)	. . . . .	Clerical Assistant

## GENERAL INFORMATION

### HISTORY

Bay City Junior College was established in 1922 by the Bay City Board of Education for the purpose of making the first two years of college more easily available to high school graduates of this area. As the College expanded, the concept of its purpose broadened until it now has come to serve the community in many ways. Recognizing the contributions which junior colleges were making, the Legislature of Michigan passed a law in 1951 which provided for a broadening of the curriculum and referred to the junior college as the "community college."

### ACCREDITATION

Bay City Junior College is fully accredited by the North Central Association of Colleges and Secondary Schools and by the Michigan Commission on College Accreditation. Junior College students graduating from transfer curricula receive full credit for work done at the Junior College provided their grades are of a quality of C or better

### PURPOSE

Bay City Junior College exists for the purpose of providing an educational program beyond the high school level which prepares its students for the responsibilities of citizenship and which offers opportunities for continuing education for all residents of the area. The specific purposes of the college are as follows:

1. To provide two years of college instruction for those planning to transfer to other colleges.
2. To provide two years of general education beyond the high school level for those who wish further education for personal development.
3. To provide one and two-year business, technical, and semi-professional programs for those who wish employment at the conclusion of their Junior College training.
4. To provide courses or total programs which meet the cultural, professional, and vocational needs of the adults in the community.
5. To co-operate with other departments of the school system and with individuals, civic groups, and other institutions of higher learning in making available educational opportunities for the community.

### ADVANTAGES

Bay City Junior College offers many advantages to its students.

1. **EXCELLENT ACADEMIC TRAINING** — Excellent instruction on the freshman and sophomore levels gives a good background for further college work.
2. **OPPORTUNITIES TO MAKE UP HIGH SCHOOL DEFICIENCIES** — Students who have neglected to elect subjects required for college curricula of



their choice have an opportunity to make up these deficiencies. High school graduates whose work has not been satisfactory may take courses to strengthen their academic background.

3. **VOCATIONAL TRAINING** — The student may receive vocational training requiring more than high school preparation.
4. **PERSONAL INSTRUCTION AND COUNSELING** — The student may secure assistance outside the classroom from his instructors. His advisers and the deans of the college also are available to assist him. A testing program gives the student and his faculty counselors information which is helpful to him in choosing a career.
5. **PARTICIPATION IN STUDENT ACTIVITIES** — A comparatively small college gives opportunity for all students to take part in extra-curricular activities.
6. **LOW EXPENSES** — The Community College is a democratic concept, for it makes available higher education regardless of the student's financial status. A large percentage of Junior College students are employed part-time. Some who wish to be totally self-supporting extend their Junior College work over a three-year period.
7. **CONTINUING EDUCATION** — Where attendance is impossible in the Day College, education may be continued in the Evening College.

## FINANCIAL INFORMATION

### TUITION AND OTHER CHARGES

All charges at Bay City Junior College, except the matriculation and graduation fees, are included in a comprehensive tuition.

Tuition each semester (twelve to seventeen semester hours):

Students whose legal residence is in the School District of Bay City (resident)	\$ 75.00
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Students whose legal residence is outside the School District of Bay City (non-resident)	115.00
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Tuition for less than twelve or more than seventeen hours (each semester hour):

Resident	6.00
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Non-Resident	9.00
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Tuition for the Summer Session (each semester hour):

Resident	9.00
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Non-Resident	13.50
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Matriculation Fee:

Paid once by each student upon admission to Day College	5.00
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Graduation Fees, including cap and gown, diploma, and final transcript	5.00
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Placement Examination Fee:

Placement Examinations at any time other than on the date set in the calendar	5.00
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Late Registration Fee	\$ 5.00
Transcript of Credits, each after first copy	1.00
Several hundred lockers are available to students who desire their use. Each locker will be made available to two students.	
For those who wish lockers, the rental per year	1.00

### REFUNDS AND CREDITS

Students who are obliged to leave college within the first few weeks of the semester may receive refunds of some portion of their tuition. Application for refunds or credits must be made through the Business Office and may be granted according to the following regulations:

- 1 No refund is granted until the student first has secured honorable dismissal from the College.
2. Refunds of tuition will be granted if withdrawal is made during the first four weeks of the semester or the first two weeks of the summer term.
3. The date of withdrawal for purpose of refund shall be the date on which application for refund is made and not the date on which class is last attended. Hence, an application for refund should be signed at once upon withdrawal. The only exception to the above shall be in cases of death or severe illness, where, upon submission of proof, a refund will be based upon the date of last attendance.

#### 4. Schedule of refunds or credits in a regular semester:

Withdrawal	Refund or charge cancelled
during first class session	100%
during first week	80%
during second week	60%
during third week	40%
during fourth week	20%
after fourth week	None

#### 5. Schedule of refunds or credits for the summer term:

Withdrawal	Refund or charge cancelled
before first class session	100%
during first week	75%
during second week	50%
after second week	None

### ORGANIZATION OF THE COLLEGE

#### DAY AND EVENING DIVISIONS:

The College has two divisions: The Day College and the Evening College. Comparable credit courses are given in the two divisions.

#### THE EVENING DIVISION:

The Evening College also offers each semester a wide variety of non-credit adult education opportunities for those interested in adding to their

knowledge, competencies, and skills. Courses in gem stones, copper modeling, ceramics, millinery, beginning dressmaking, tailoring, slip covering, swimming, life-saving, photography, and shop "Do-It-Yourself" courses are characteristic of this division.

Through both evening classes and co-ordinated home study courses, an ever-increasing number of adults are completing credits leading to a standard high school diploma. Any interested adult may commence his evening high school studies any Monday evening during the year with the exception of the last two weeks in August.

Community service programs are offered with the joint sponsorship of such organizations as the Bar Association, The Medical Society, Public Libraries, Junior Chamber of Commerce, Red Cross, Mental Hygiene Society, Parent-Teacher Associations, League of Women Voters, and with other characteristic community organizations.

## **SUMMER SESSION**

A summer session of six weeks offers regular college courses for which there is sufficient demand. If possible, students should indicate their election of courses by the middle of the second semester so that the college summer program may be planned. Tuition and fees are listed on page 10.

## **FACILITIES**

### **BUILDINGS**

The College occupies the third floor of the Central High School — Junior College building, located on Columbus Avenue. The Board of Education Building and the Annex, both situated near the main building, also are used. Classes in education are held at Lincoln School. In the fall of 1957 the college will see completed for its use one of the finest gymnasiums in the State.

### **LIBRARY**

The library, an attractive and well-lighted room, contains a collection of books selected to meet the requirements of the college. It subscribes to approximately one hundred periodicals and several newspapers; back files of many are available for reference.

The library is staffed by a professional librarian and an assistant. The facilities of the Bay City Public Library, the Sage Library, and in Saginaw the Hoyt Public Library also are readily accessible to college students.

### **LABORATORIES**

The College is well equipped for work in the sciences: astronomy, biology, chemistry, geology, and physics. The pre-dental, pre-medical, and engineering requirements in the various sciences are met adequately with the facilities of these modern laboratories.

### **CAFETERIA**

A non-profit cafeteria, at which excellent lunches may be secured at very reasonable prices, is available.



## **EDUCATIONAL GRANTS**

### **FOR STUDENTS ATTENDING JUNIOR COLLEGE**

A number of educational grants are available to Junior College students. The amounts of the grants vary, but in general twenty-five to thirty dollars each semester is awarded toward tuition payment. These are awarded primarily on the basis of need, along with satisfactory academic records. Each grant is made for one semester, renewable the following semester provided the student has maintained a satisfactory record.

The money used for these educational grants comes from a variety of sources. Some is given by local firms and industries such as the Dom Chemical Company, Industrial Brownhoist Corporation, and Jennison Hardware Company. Both the Bay County and the Bay City Councils of Parents and Teachers make annual contributions. The income from a fund established in honor of George E. Butterfield, who served for twenty-three years as Dean of the College, also is used for educational grants. Further funds are provided by the Bay County Bar Auxiliary, Kiwanis International, Panhellenic Society, Knights of Columbus, the Women's League of Bay City Junior College, and by individual donors. The Bay City Board of Education provides annually six grants for students residing outside the Bay City School District.

Applicants for Educational Grants should contact the Chairman of the Scholarship Committee of Junior College or the Dean of the College. Application blanks also may be secured through high schools of the area. No application for financial assistance is given consideration until application for admission to the College has been completed.

### **SCHOLARSHIPS FOR JUNIOR COLLEGE GRADUATES**

#### **MICHIGAN STATE BOARD OF EDUCATION SCHOLARSHIPS**

These scholarships have been made available for those entering teacher training at Central Michigan College, Eastern Michigan College, Western Michigan University, and Northern Michigan College. They pay tuition for one year, renewable if a satisfactory academic record is maintained. Applications may be secured from the Registrar of Junior College. A number are granted annually to Bay City Junior College graduates.

#### **THE UNIVERSITY OF MICHIGAN PUBLIC JUNIOR COLLEGE SCHOLARSHIPS.**

Each year since 1941 the University of Michigan has made available a number of scholarships to Junior College graduates. These are awarded upon the basis of scholarship, citizenship, need, and the recommendation of the Junior College Scholarship Committee. They cover tuition and fees for one year, renewable if a satisfactory record is maintained. In 1957 seven such scholarships were granted to Bay City Junior College graduates. Application is made through the Chairman of the Junior College Scholarship Committee.

#### **MICHIGAN STATE UNIVERSITY JUNIOR COLLEGE SCHOLARSHIPS.**

In 1949 Michigan State University established scholarships for Junior

College graduates. These awards are based upon scholarship, citizenship, need, and the recommendation of the Junior College Scholarship Committee. They cover tuition and fees for one year, renewable if a satisfactory standard of scholarship is maintained. Application should be made through the Chairman of the Junior College Scholarship Committee.

### **MICHIGAN COLLEGE OF MINING AND TECHNOLOGY**

The Michigan College of Mining and Technology awards annually a tuition scholarship to a Bay City Junior College graduate. Application should be made through the Chairman of the Junior College Scholarship Committee.

### **WAYNE UNIVERSITY**

Wayne University makes available two tuition scholarships annually to Bay City Junior College. Applications should be made through the Chairman of the Junior College Scholarship Committee.

### **OTHER SCHOLARSHIPS FOR JUNIOR COLLEGE GRADUATES.**

Many other universities and four-year liberal arts colleges award scholarships to Junior College graduates. For information contact the Dean of Men and Dean of Women of Junior College or the Chairman of the Bay City Junior College Scholarship Committee.

## **STUDENT SERVICES**

### **COUNSELING**

The College believes that counseling services are important in helping the student achieve the greatest possible success. Hence the counseling program begins before the student registers and continues through his entire Junior College course. Before the date of registration a series of placement examinations is given to all new students. The results of these tests, made available to the student at a special conference, assist him in understanding his particular abilities and in choosing a career.

Each student is assigned an adviser, who is well-informed on the curriculum which the student has selected. The adviser will assist the student throughout his Junior College years in selecting courses needed for his specific objectives. If the student is planning to continue his education beyond Bay City Junior College, he should know which senior college he wishes to attend in order to choose the courses which will be required in transfer. Should a student be undecided concerning his plans beyond college, trained counselors are available to help him.

Students who expect to terminate their formal education at the Junior College level are encouraged to explore the courses which have been suggested by business and industry to fit them for future employment in the community.

In addition to the counseling given by the Faculty Advisers, the assistance of the Dean of the College, the Dean of Men, and the Dean of Women is available.

## READING CLINIC

A Reading Improvement Clinic (listed as English 12) is designed to assist all students who wish to improve their reading speed and comprehension. Enrollment is optional.

## PLACEMENT

The Dean of Men and the Dean of Women assist students in securing part-time employment. The College also co-operates in the placement of students in work for which they have been trained.

## BOOKSTORE

Textbooks and supplies may be purchased at reduced rates at the college bookstore. Books cost approximately \$25.00 a semester, the amount varying with the courses elected.

## MEN'S ATHLETICS

Bay City Junior College believes that sports are a medium for physical, social, and mental development. For those who participate as players or spectators, there is opportunity to observe and exemplify good sportsmanship. Since the College feels that there should be an opportunity for all to participate, a comprehensive program of intramural athletics is planned. Intercollegiate sports give those who excel a chance to play against competitors. Teams compete in the Michigan Junior College Conference in the following sports: cross-country, basketball, swimming, golf, tennis, and track. This inter-collegiate schedule gives the college students and the community, where we are the only college, a chance to observe as spectators college teams in their favorite sports. This program also brings our players and students in contact with players and students of neighboring colleges.

## WOMEN'S ACTIVITIES

The women participate in intramural sports and intercollegiate contests. Awards are given in field hockey, bowling, basketball, volleyball, softball, and swimming.

## ACTIVITIES

Because of the relatively small size of the College, participation in activities is made possible for all. In addition to plays, assemblies, roller-skating parties, open houses, and other student events, the College sponsors many organizations, including: Student Council, Student Social Committee, Publications, Women's League (for all college women), Men's Union (for all college men), Business Administration Club, Engineers' Club, Tetra Sci Club (for science students), Psychology Club, County Normal Club, Lettermen's Club, Veterans' Club, Camera Club, Ski Club, Student Christian Fellowship, Newman Club, Circle K, (affiliated with Kiwanis International), Journalism Club, Choir, Debate, Phi Theta Kappa (national honor society), and inter-collegiate and intramural athletics.



## **REGULATIONS**

### **CONDUCT OF STUDENTS**

College students are considered to have reached the age of responsibility and discretion. Their conduct shall be that of reliable American citizens. It is essential that those who enroll in Bay City Junior College realize that their success rests on their own efforts and attitude.

### **ATTENDANCE POLICY**

- 1 Attendance is expected at all classes.
2. Courtesy demands that students explain the reasons for their absences to their instructors.
3. It is the responsibility of students to make definite arrangements for all work before going on field trips or other school-sponsored events.
4. Any student whose absences from any class exceed the number of times that class meets weekly shall stand suspended from that class. The instructor may, at his discretion, admit the student to one additional meeting of the class.
5. A student who has been suspended from class may petition the Dean for re-admission.

### **CONVOCATIONS**

One hour of each week is reserved for convocations. Students are expected to attend all convocations, which will be called at stated intervals. Failure to attend results in disciplinary action.

### **RESIDENCE POLICY FOR WOMEN**

All college women who are not living with relatives are required to live in residences which have the approval of the College. College women not living with relatives may not change residence during the college year without the permission of the Dean of Women.

### **GRADE REQUIREMENT**

Students with a semester grade average of less than C (2.0) may not accept offices or major chairmanships the following semester.

### **CHANGE OF SCHEDULE**

- 1 Students who wish to change their elections in any way whatsoever must secure permission and the proper forms from the Dean of Men or the Dean of Women. These written requests must then be approved and signed by the adviser and instructors concerned before being filed in the Registrar's office.
2. The last date for entrance into a course is the last day of the second week of the college semester
3. Courses dropped before the completion of the fourth week of the semester will be recorded as "dropped"
4. Courses dropped after the fourth week of a semester will be recorded as dropped, with a letter grade and the notation "no credit".

## WITHDRAWAL FROM COLLEGE

To withdraw from college the student must secure a withdrawal slip from the Dean of Men or the Dean of Women. Records for students withdrawing are handled as explained under Change of Schedule (3-4).

## CLASS LOAD

No student may elect more than 17 hours (not including physical education) without special permission from the Administration. He must have earned an honor point average of C+ (2.5) or better during the previous college semester or during the last semester in high school, depending upon which was more recent.

## ACADEMIC INFORMATION

### TYPES OF CURRICULA

Bay City Junior College has two types of curricula or programs. Before making application for admission, the student should understand the difference between these two programs, since the application blank requests a statement as to the type of curriculum desired. A student must be admitted not only to the college but also to a definite curriculum. (See p. 25.) The curricula are organized as follows:

#### ONE AND TWO-YEAR TERMINAL CURRICULA (TYPE A)

These are intended for those students who wish only one or two years of college or for those whose previous training is inadequate to allow admission to a Type B curriculum. Some of these programs are of a general nature. Others are vocational and prepare the student for a specific type of work. (See p. 25).

#### TWO-YEAR TRANSFER CURRICULA (TYPE B)

These are intended for students who plan to transfer to senior colleges. Those wishing to enroll in one of these programs of study with the intention of transferring must be graduates of accredited high schools and have earned an average of C (2.0) or better in the academic subjects. Freshmen whose high school records or transfer students whose previous college records do not satisfy the two requirements of a C average and the necessary background subjects will be placed in a Terminal Curriculum until such a time as they have made up all deficiencies. (See p. 25). Students should be sure that their high school credits satisfy the entrance requirements of the colleges to which they plan to transfer. In this respect, special attention should be given to English, science, mathematics, and foreign languages.

## ADMISSION REQUIREMENTS

### FRESHMEN

All high school graduates are eligible for admission to Bay City Junior College. They will be admitted, however, only to those curricula for which they show adequate preparation. Students who have deficiencies in courses

required for curricula of their choice will find it necessary to enroll in other curricula for which they are prepared. (See p. 25). Each student is admitted not only to the College but also to a particular curriculum which fits his preparation and goal.

### TRANSFER STUDENTS

Students with advanced standing are admitted to the College when it seems probable that they will profit from the Bay City Junior College program. Credits are accepted by the Junior College only from accredited educational institutions of higher learning.

### SPECIAL STUDENTS

Adults may enroll in any Junior College class from which they can profit. If credit earned in Junior College is applied toward high school graduation, it cannot be used as college credit.

### TIME OF FILING APPLICATION

Incoming freshmen should make application during the last semester of their senior year. Those filing later may be at a disadvantage in their choice of courses. Transfer students should file application at the earliest possible date.

### ADMISSION PROCEDURE

All applicants for admission to the Day College must follow the procedure as outlined:

1. **APPLICATION BLANK, HEALTH BLANK, AND PHOTOGRAPH.** Secure an application and a health blank from the Registrar of Bay City Junior College or from the high school from which the applicant graduates. These are to be made out in full and returned by the applicant to the Registrar of the College. A photograph must accompany each application. The health blank may be turned in later but must be on file in the College BEFORE the student enrolls. Failure to turn in the health blank results in exclusion from classes.
2. **TRANSCRIPT OF CREDITS.** Request a transcript of credits from the last educational institution attended. It is the responsibility of every freshman to see that the high school sends his credits directly to the Junior College. It is likewise the responsibility of transfer students to request that credits be sent directly from colleges attended previously. The application is NOT complete until these transcripts are on file.
3. **PLACEMENT TESTS.** Before enrolling in Bay City Junior College applicants are required to take placement tests, which are used in the counseling program of the college. (See pp. 2, 14). Information concerning the times at which these tests are given may be secured through the College office.



## REGISTRATION

For registration dates students are referred to the College Calendar on page 2. New students whose applications have been accepted prior to registration will be notified by mail when to report.

Each student will confer with his faculty adviser at the time assigned him. While advisers will assist the student in selecting his courses, the student himself should have studied the Junior College catalogue thoroughly and be prepared to make choices. If he plans to transfer to some other college, it is necessary to bring with him the catalogue of that college.

Students who wish to enroll in the Evening College will secure all necessary forms at the time of registration.

Tuition and fees are payable at the time of registration. Those who register after the scheduled period are charged a \$5.00 late registration fee.

## GRADUATION REQUIREMENTS

Graduation from Bay City Junior College is recognized with either a Certificate of Graduation or an Associate Degree.

### CERTIFICATE OF GRADUATION

All candidates for graduation must have been in residence at this or another institution of higher education for the equivalent of at least four semesters; they must have been in residence at this college for at least the last 12 hours of their Junior College study.

All candidates for graduation must have a Grade Point Average of 1.5 and complete a minimum of sixty-two semester hours of credit to include the following:

- 1 Six hours of credit in English.
2. One course in Political Science: 101, 102, or 103.
3. Two hours of credit in Physical Education (unless officially excused). When the student is excused officially, the minimum number of hours required for graduation is reduced to sixty.

### ASSOCIATE DEGREES

Candidates for Associate Degrees must meet the following requirements in addition to those for the Certificate of Graduation.

- 1 For all degrees:  
A minimum honor point average of 2.0, exclusive of Physical Education.
2. For the Associate in Arts degree:
  - a) Successful completion of one of the transfer (type B) curricula, (See p. 25).
  - b) Completion of at least eight semester hours of credit from each of Group I (Humanities), Group II (Science), and Group III (Social Science) as explained on page 20.
3. For the Associate in Science degree:
  - a) Successful completion of one of the transfer (type B) curricula, (See p. 25).

### ASSOCIATE DEGREES Continued

- b) Completion of at least eight hours of credit from each of Groups I (Humanities) and Group III (Social Science) as explained below
- c) Completion of at least 20 hours of credit from Group II (Science).
- 4. For the Associate in General Studies degree:
  - a) Successful completion of either a terminal (type A) or transfer (type B) curriculum. (See p. 25).
  - b) Completion of at least 20 hours of credit from one or more areas related to the chosen curriculum.
- 5. For the Associate in Business Studies degree:
  - a) Successful completion of either a terminal (type A) or transfer (type B) curriculum. (See p. 25).
  - b) Completion of at least 20 hours of credit in business subjects.
- 6. For the Associate in Engineering degree:
 

Successful completion of a transfer (type B) engineering curriculum. (See p. 25).

### GROUP DISTRIBUTIONS

- Group I    Humanities: American Literature, English Literature, Art Appreciation, Music Appreciation, Speech, French, Spanish, German.
- Group II    Science: Biology, Chemistry, Geography\*, Geology, Mathematics, Physics, Physiology, Psychology\*
- Group III    Social Science: Economics, Geography\*, History, Political Science, Philosophy, Psychology\*, Sociology.

\* The courses in Psychology and Geography are included in either Group II or Group III.

### GRADES AND HONOR POINTS

The following grading system is used: A, Excellent; B, Good; C, Fair; D, Poor; E, Not Passed; I, Incomplete. If an incomplete is not removed by the end of the fourth week of the semester following that in which the I was given, the grade becomes an E.

The honor point system is as follows: for each credit hour of A — 4 points; B — 3 points; C — 2 points; D — 1 point; E — no point. In averaging the over-all honor points, the number of hours of E must be included, although no honor points are allowed. Honor points for physical education are not included in the over-all average.

Students receive grades at mid-semester from their faculty advisers. Grades are mailed to students at the end of the semester

### RECOMMENDATIONS FOR TRANSFER

In order to receive the recommendation of Bay City Junior College to a senior college, a student must have at least an average grade of C. For some senior colleges a grade of B or better is required. Grades of D are not transferable.

## TRANSCRIPTS OF CREDITS

Students wishing transcripts of records should make requests a week in advance of the time they are needed. No transcripts will be made out during the registration period.

Transcripts of credits for purposes of transfer are sent directly to the institutions designated by the student. Transcripts intended for the student's own use are so indicated and are not certified as "official."

A transcript will be issued only after the student has fulfilled all of his financial obligations to the College.

## COLLEGE SUCCESS

The Bay City Junior College faculty believes that all students should show academic accomplishment if they are to remain in college. Students showing unsatisfactory progress are referred to the Dean of Men or Dean of Women. If the record continues to be unsatisfactory, the faculty may require the withdrawal of the student from college.

While the faculty wishes to assist the student in every way possible, by individual help and counseling, the student must take the responsibility for his ultimate success. Absences from class and too heavy work programs inevitably lower academic accomplishment.

The College program is planned to occupy fully the student's time. The student must face realistically his own abilities and limitations and arrange his total schedule accordingly. If it is necessary for him to work more than ten or twelve hours weekly in addition to carrying a college program, he should reduce his academic load proportionately.

## HONORS AND HONOR SOCIETY

Each semester there is issued a Dean's list, containing the names of all students who have an average of B+ (3.5) or better

Graduates who are in the upper ten per cent of the class are honored at the Annual Honors Convocation and at Commencement.

Bay City Junior College has a chapter of Phi Theta Kappa, National Junior College Honor Society. To be eligible for membership a student must (1) carry at least fifteen hours of credit, twelve of which are transferable to other colleges (2) be in the upper ten per cent of his class (3) have a B average. Members are selected on the basis of scholarship, character, citizenship, and leadership.

## DISTRIBUTION REQUIREMENTS OF SENIOR COLLEGES

Every college to which Junior College students transfer has certain group or distribution requirements for graduation. Students should check the catalogues of the senior colleges of their choice for this information. Listed below are requirements of some of the colleges to which Bay City Junior College graduates transfer.



## DISTRIBUTION REQUIREMENTS Continued

## CENTRAL MICHIGAN COLLEGE

Distribution requirements vary according to the curriculum. Students should check the C.M.C. Catalogue with their advisers.

All curricula must include the following:

Group I. Language and Literature, at least 12 hours. Ancient Language and Literature; English Language and Literature; Modern Language and Literature; Speech.

Group II. Science, at least 12 hours. Anatomy, Botany, Chemistry, Geography, Geology, Hygiene, Mathematics, Physics, Physiology, Psychology, Zoology.

Group III. Social Science, at least 12 hours. Economics, History, Philosophy, Political Science, Sociology.

Group IV Education taken at Central Michigan College.

Group V Fine Arts (Varies with curriculum). Art 105-106 and Music 101

Group VI. Practical Arts (Varies with curriculum).

Group VII. Physical Education and Health Education, 4 hours.

For Bachelor of Music Education and Bachelor of Music degrees check special requirements.

## MICHIGAN STATE UNIVERSITY

The attention of all students who plan to transfer to Michigan State University is directed to the M.S.U. plan of the Basic College. Students in all degree programs, are required to complete four Basic College courses and two years of physical education.

Michigan State will accept as substitutes for the Basic Courses credits in related subjects if the grade is C or better. The Basic Courses and the acceptable Bay City Junior College equivalents follow:

- A. Communication Skills (Basic 111, 112, 113): English 101, 102 and Speech 125 or 221; Engineers: Speech 101, 102.
- B. Natural Science (Basic 181, 182, 183): Eight semester hours divided between the biological sciences (Biology and Physiology 103) and the Physical Sciences (Astronomy, Chemistry, Geology, Physics).
- C. Social Sciences (Basic 231, 232, 233)  
Eight semester hours in two or more of the following groups:  
I. Economics 111, 112; 201, 202. II. Geography 101, 102, 103, 106.  
III. History 201, 202, 203. IV. Political Science 101, 102, 103. V. Psychology 201, 202. VI. Sociology 201, 202.
- D. Humanities (Basic 241, 242, 243)  
Eight semester hours in two or more of the following groups:  
I. History 101, 102. II. English 223, 224, 231, 232, 241 III. Music 101, Art 105, 106. IV. Philosophy 100, 210, 220, 230.

UNIVERSITY OF MICHIGAN  
COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS

- 1 English 101-102 6 hrs.
- \*2. Mathematics or Philosophy — A two-semester sequence in either one 6-8 hrs.
- \*\*3. Foreign Language equivalent to four-semester's proficiency 8-16 hrs.
4. Humanities: Literature (English 223, 224, 231, 232); Art, 105, 106; Music 151, 152, 251, 252. A two-semester sequence in any one subject 6-8 hrs.
5. Social Science: Economics, Geography, History, Political Science, Psychology, Sociology Work in at least two departments, including a two-semester sequence in one department. Psychology 201 and Sociology 201 constitute a sequence. (Not more than eight hours in one department to be taken in satisfaction of this requirement.) 14 hrs.
6. Natural Science: Astronomy, Biology, Botany, Chemistry, Geology, Physics, Zoology. Work in at least two departments, including a two-semester sequence in a laboratory course in one department. Physiology 103 is acceptable when offered in conjunction with eight hours of natural science in fields other than biology 12 hrs.

A minimum of forty hours of the distribution requirements, including English Composition, completion of the foreign language requirement, eight hours in the social sciences, and eight hours in the natural sciences, must be completed within the first sixty hours of college work. While in Junior College, the student also should take courses that are prerequisites for the field of concentration he plans to enter in the junior year

\* Not required in School of Education

\*\*Not required in Schools of Education or Business Administration

UNIVERSITY OF MICHIGAN — SCHOOL OF EDUCATION

1. English 101-102 6 hrs.
2. At least twelve hours of credit from each of the following groups:
  - Group I Ancient languages and literatures, modern languages and literatures, including English (other than courses 101 and 102), and Speech 221, 222.
  - Group II Botany, Chemistry, Zoology, Mathematics, Physics, and Geology.
  - Group III. Economics, Geography, History, Philosophy, Political Science, Sociology, and Psychology 201-202.

Students should check the University of Michigan School of Education catalogue for requirements for specific curricula.

## WESTERN MICHIGAN UNIVERSITY

The attention of all students who plan to transfer to Western Michigan University is directed to the Western Michigan University plan of Basic Studies. Students in all degree programs are required to complete four Basic Studies Courses and four hours of physical education.

Western Michigan will accept as substitutes for the Basic Courses credits in related subjects if the grade is C or better. The Basic Courses and the acceptable Bay City Junior College equivalents follow:

- A. Communication: English 101-102 6 hrs.
- B. Science: Eight semester hours in any combination of two or more of the following groups: I. Biology or Physiology 103. II. Chemistry III. Geography (101 preferred) or Geology. IV. Physics.
- C. Social Studies: Eight semester hours in History 101, 102 or in any combination of two or more of the following: I. History, 201, 202. II. Economics. III. History 102. IV. Political Science 101, 102, 103. V. Sociology 201, 202.
- D. Humanities: Need not be divided among groups. Six hours from: I. Art 105, 106. II. Music 101 III. Foreign Language (8 hours). IV. Literature (English 223, 224, 231, 232, 241). V. Philosophy (100 preferred).
- E. At least 4 hours in Physical Education.
- F. Further additional General Education Courses depending upon the curriculum to which the student transfers. Consult Western Michigan University catalogue.

## MAJORS AND MINORS IN SENIOR COLLEGES

In addition to distribution requirements most colleges require students to select major and minor fields of concentration. A major is a field of concentration in which the student completes the greatest number of hours, usually from twenty-four to thirty. A minor requires fewer hours, usually varying from fifteen to twenty. The number of hours in both major and minor fields is definitely prescribed by each college and varies widely among the colleges and among curricula.

In order to plan the Junior College program satisfactorily the student should be familiar with the major-minor requirements of the college to which he will transfer



# INDEX OF CURRICULA

## "A" CURRICULA

### One and Two-Year Terminal Curricula

These curricula are designed for those students who plan to complete their college work in one or two years. There is no guarantee that the courses in these curricula will transfer to other colleges. Students may, however, be able to use some of the credits for transfer. A student who has been accepted on a terminal curriculum but wishes to be enrolled in a program which will transfer to a senior college may change to such a transfer curriculum when he has made up course deficiencies and has a C average. Written application for admission to a transfer program should be made on a form secured from the Registrar of the Junior College and filed with him.

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## "B" CURRICULA

### Two-Year Transfer Curricula

These curricula are designed for those students who plan to transfer to senior colleges after their graduation from Bay City Junior College. The attention of the student is called to the fact that graduation requirements differ widely among senior colleges. It is the responsibility of the student to check with his adviser to see that the elected courses fill the requirements of the senior college of the student's choice. Work of less than C grade will not transfer.

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## "A" CURRICULA

### ARCHITECTURE

#### TECHNICAL ARCHITECTURE CURRICULUM

This two year program is offered to provide basic training for architectural draftsmen. It is a sequence of intensive courses for specific employment.

#### Suggested Courses

First Year		Second Semester	
First Semester			
English 116	3	English 117	3
Architecture 111	3	Architecture 112	3
Art 101	3	Art 102	3
Business 101	2	Drawing 120	2
Mathematics 15	5	Mathematics 31	4
	—	Elective	1
	16 hrs.		16 hrs.

Second Year		Fourth Semester	
Third Semester			
Architecture 211	3	Architecture 212	3
Art 105	3	Art 106	3
Economics 111	3	Art 108	2
Mathematics 121	3	Mathematics 131	3
Political Science 103	3	Speech 102	2
Physical Education	1	Physical Education	1
	—		—
	16 hrs.		14 hrs.

### BUSINESS CURRICULA

#### ONE-YEAR CURRICULA

These courses, designed especially for the student who plans to attend college for only one year, give the technical knowledge necessary for entry into the business field. Students completing this program have been placed in attractive positions. The following courses are recommended but may be changed to meet individual needs and interests.

#### ACCOUNTING CURRICULUM

#### Suggested Courses

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111 or 112	3	Accounting 112	3
Economics 111	3	or Accounting elective	
Business 101 . . .	2	Economics 112	3
Business 121	2	Mathematics 101	3
Elective	3	Elective	3
	—		—
	16 hrs.		15 hrs.

Suggested electives: Bus. 251 and/or 252; Bus. 131; Bus. 161; Acct. 261, 262, 263, or 264; Physical Education.



### MACHINE CALCULATION CURRICULUM Suggested Courses

First Semester		Second Semester	
English 116	3	English 117	3
Business 121 and 122	4	Business 123	2
Business 101	2	Business 102	2
Accounting 111	3	Business 241	3
Elective	3	Business 131, 132	2
(Math. 101 suggested)		Elective	3
<hr/>		<hr/>	
15 hrs.		15 hrs.	

### SECRETARIAL CURRICULUM Suggested Courses

First Semester		Second Semester	
English 116	3	Speech 125	3
Accounting 111	3	Business 113	3
Business 112	4	Business 103	2
Business 102	2	*Psychology 201	4
Elective	3	Business 241	3
<hr/>		<hr/>	
15 hrs.		15 hrs.	

If a student has had business courses in high school, it may be possible to substitute additional electives.

\*With consent of instructor.

### TWO-YEAR CURRICULA

There are excellent positions open for Junior College graduates in business. The two-year business curricula are designed to provide knowledge of business practices for business or administrative careers. As far as practicable, non-essentials are eliminated, so that all of the student's time and effort may be devoted to matters of real value to him.

### ACCOUNTING CURRICULUM

Accounting is a rapidly growing and expanding profession. The two-year suggested program provides a background in accounting and related subjects which will prepare students for opportunities available in public and private accounting. An accounting background is also highly desirable for managerial and executive positions as well as for the operation of one's own business.

#### Suggested Courses First Year

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Accounting 112	3
*Business 101	2	Business 161	3
Business 121	2	Economics 112	3
Economics 111	3	Elective	3
Mathematics 101	3	Physical Education	1
Physical Education	1	<hr/>	
<hr/>		16 hrs.	
17 hrs.			

\*Elective may be substituted upon demonstration of equivalent typing skill.

## ACCOUNTING CURRICULUM Continued

## Second Year

Third Semester		Fourth Semester	
Accounting 261	3	Accounting 263	2
Accounting 262	3	Accounting 264	3
Business 251	3	Business 131	1
Political Science 101, 102, or 103	4, 3	Business 186	3
Speech 125	3	Business 271	3
		Business 241	3
	<hr/>		<hr/>
	16, 15 hrs.		15 hrs.

## GENERAL BUSINESS CURRICULUM

Some students are not interested in accounting or secretarial work as a major field of endeavor but wish to prepare themselves for other phases of business such as sales, retailing, proprietorship, or management. A sequence of courses may be set up to meet the vocational needs and interests of the individual student.

## Suggested Courses

## First Year

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Accounting 112	3
*Business 101	2	Business 161	3
Business 121	2	Business 176	3
Economics 111	3	Economics 112	3
Mathematics 101	3	Physical Education	1
Physical Education	1		
	<hr/>		<hr/>
	17 hrs.		16 hrs.

## Second Year

Third Semester		Fourth Semester	
Business 251	3	Business 181	3
Economics 121	3	Business 241	3
Political Science 101, 102, or 103	4, 3	Business 252	3
Speech 125	3	Business 271	3
*Business 102	2	Economics 131	3
Business 131	1		
	<hr/>		<hr/>
	16, 15 hrs.		15 hrs.

\* Electives may be substituted upon demonstration of equivalent typing skill.

### SECRETARIAL CURRICULUM

There are many job opportunities for the college-trained secretary. The secretary to an executive has responsibilities beyond the necessary basic skills of stenography. This program is designed to give the student not only those skills but also a background of business and cultural education. It enables the secretary to handle those business details which do not need his employer's immediate attention. It develops imagination, resourcefulness, and a general understanding of business practices.

#### Suggested Courses First Year

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Business 102	2
*Business 101	2	Business 112	4
*Business 111	4	Business 161	3
Economics 111	3	Economics 112	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	

#### Second Year

Third Semester		Fourth Semester	
Business 113	3	Business 121	2
Business 131, 132, 133	3	Business 114	3
Mathematics 101	3	Business 241	3
Speech 125	3	Business 103	2
Political Science 101, 102, or 103	4, 3	Electives	5
<hr/>		<hr/>	
16, 15 hrs.		15 hrs.	

\* Electives may be substituted upon demonstration of equivalent skills.

### MEDICAL SECRETARIAL CURRICULUM

There are many job opportunities for medical secretaries in hospitals, clinics, offices of physicians and dentists, insurance offices, and drug and instrument supply firms. This course is so designed that the student builds a vocabulary of medical terms and develops a background of business and cultural education which will enable him to handle the responsibilities that come to those employed in this field.

#### Suggested Courses First Year

First Semester		Second Semester	
English 116	3	English 117	3
*Business 101	2	*Business 102	2
*Business 111	4	Business 112	4
Physiology 101	4	Physiology 103	4
Mathematics 101	3	Speech 125	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

\* Electives may be substituted upon demonstration of equivalent skills.





## LIBERAL ARTS CURRICULA

## GENERAL ACADEMIC CURRICULUM

This curriculum is designed for those who wish only a year or two of general education beyond high school or who are not qualified for a transfer program because of subject or scholastic deficiencies. Students who have enrolled in this curriculum to make up deficiencies should discuss their plans with their advisers. The student's adviser will help him choose courses in keeping with his abilities and interests. The only specific courses required for graduation from this curriculum are two semesters of English, one semester of political science, and two semesters of physical education. (See page 19).

Some courses of particular interest to the student on the general academic program are the following: Business 101, 102; Economics 111, 112; English 5, 6; English 12; English 14, 15; English 116, 117; Mathematics 15 or 101; Music 141, 101; Physiology 101; Political Science 101, 102, 103; Conversational Spanish 103, 104.

## GENERAL ART CURRICULUM

This program is designed for students who are interested in the field of the creative arts as part of their general and cultural education.

## Suggested Courses

## First Year

First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Art 101	3	Art 102	3
Art 105	3	Art 106	3
Music 101	3	Art 108	2
Speech 125	3	Political Science 101, 102, or 103	4, 3
Physical Education	1	Physical Education	1
	—		—
	16 hrs.		16, 15 hrs.

## Second Year

Art 109, 135, 223, and 236 are recommended, with other electives suggested from the following fields of interest: Economics 111, 112; English 223, 224, 231, 232, 241; Foreign Languages (French, German, or Conversational Spanish); History; Music 101 and 141; Philosophy 100; Physiology 101; Political Science; Psychology 201, 203; Sociology 201, 202; Speech 125, 126.

### TECHNICAL ART CURRICULUM

This program is designed for the student interested in exploring art courses with a view to possible employment in the field of commercial or interior design.

#### Suggested Courses First Year

First Semester		Second Semester	
English 116	3	English 117	3
Art 101	3	Art 102	3
Art 108	2	Art 109	2
Business 101	2	Business 102	2
Political Science 101, 102, or 103	4, 3	Business 176	3
Physical Education	1	Drawing 120	2
		Physical Education	1
<hr/>		<hr/>	
15, 14 hrs.		16 hrs.	

#### Second Year

Art 105, 106, 135, and 223 are recommended, with electives to meet interests from the following suggested fields: Business; Drafting; Economics 111, 112; English 223, 224, 231, 232, 241; Psychology 201, 203; Sociology 201, 202; Conversational Spanish; and Speech 125.

### MEDICAL AND HEALTH CURRICULA

#### MEDICAL TECHNOLOGY CURRICULUM

Medical technologists who do not wish to complete a degree program of four years may take two years of Junior College and one year of professional training at a hospital. Some hospitals in Saginaw Valley offer a salary during this third year of training.

#### Suggested Courses First Year

First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Biology 105 or 111	4	Biology 121 or 205 or elective	4
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
Mathematics 121 or Political Science 101, 102, or 103	3, 4	Mathematics 141, 157, or elective	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
15, 16 hrs.		15, 16 hrs.	

#### Second Year

Third Semester		Fourth Semester	
Chemistry 225 or 226 or elective	4, 3	Chemistry 222 and 223 or electives	6
Physics 101 or elective	4	Physics 102 or elective	4
Physiology 103 or elective	4	Electives	6
Elective	4		
<hr/>		<hr/>	
16, 15 hrs.		16 hrs.	

One year of general inorganic chemistry is required and either Quantitative Chemistry (225 or 226) or Organic Chemistry (222 and 223). Quan-



titative Chemistry is recommended. Twelve semester hours of biological science is required. Students may elect Biology 105 or 111, Biology 121, and Physiology 103; or Biology 111, Biology 204, and Physiology 103.

### PRE-NURSING CURRICULUM

Some students prefer to study one year at Junior College before entering accredited hospital schools of nursing. College subjects give excellent background for the professional courses.

Suggested Courses			
First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Biology 105 or 111	4	Chemistry 104 or 112	4
Chemistry 103 or 111	4	*Psychology 201	4
Physiology 101	4	Physiology 103	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	

\* With permission of instructor

### PRE-NURSING CURRICULUM

Practical Nursing is a twelve-month vocational program. It is open to both women and men between the ages of 18 and 50. The first semester extends over sixteen weeks; the second, over thirty-two weeks. Students are in classes seven hours daily. In addition, home study is necessary. New classes begin in September and February. Credits earned during this year are non-transferable. After completing the program, the student is granted a Certificate of Achievement in Practical Nursing. The graduate practical nurse is required to write State Board Examinations to receive a State License as a practical nurse.

First Semester		Second Semester	
Nursing 51, 52, 53, 55	8	Nursing 56, 58	6
Nutrition 51	3	Nursing 60	14
Physiology 51, 53	4		
Sociology 51	2		
<hr/>		<hr/>	
17 hrs.		20 hrs.	

## NATURAL RESOURCES

### AGRICULTURE CURRICULUM

The following program is designed for those who wish added general education which will be particularly valuable in agricultural careers.

#### Suggested Courses

First Year		Second Semester	
First Semester			
English 5 or 101	3	Biology 121	
Biology 105		or Physiology 101	4
or Chemistry 103	4	Business 101	2
Geography 101	4	Mathematics 101	3
Geology 101	4	Political Science 101, 102,	
Physical Education	1	or 103	4, 3
		Elective	3
	16 hrs.	Physical Education	1
			17, 16 hrs.
Second Year		Fourth Semester	
Third Semester			
English 116	3	Accounting 112	3
Accounting 111	3	Business 161	3
Economics 111	3	Economics 112 or 121	3
Shop I	7	Shop 8	7
	16 hrs.		16 hrs.

## PUBLIC SERVICE CURRICULA

### AIR TRANSPORTATION

Many opportunities for both men and women are open in the expanding industry of Air Transportation. Advisers in Bay City Junior College can provide information regarding the various types of work for which a student may prepare and will assist in planning a suitable program of studies. Fields of opportunity include: accounting and finance, communications, engineering, general office work, flight dispatching, maintenance, meteorology, personnel, purchasing, reservations, hostessing, and supply traffic.

### AIRLINE HOSTESS CURRICULUM

This may be a one or two-year course, which must be followed by short, intensive training of a few weeks either at a school operated by an airline or by one specializing in airline operations.

The following program recommended by a national airline is characteristic of suggestions made by other airlines.

#### Qualifications:

Age: 20 to 28 inclusive  
 Marital Status: Single  
 Height: 5' 2" to 5' 7"  
 Weight: 130 pounds maximum in proportion to height

Visual Acuity: 20/30 without corrective lenses  
 Attractive appearance and personality

## Suggested Preparatory Courses for Airline Hostesses:

English, Psychology, Public Speaking, Sociology  
 Because of constant contact with people of all temperaments  
 First Aid, Hygiene, Nurse's Aid, Physiology  
 Because she is responsible for the comfort and welfare of passengers  
 Home Economics  
 Because she serves meals and snacks  
 Languages  
 Because her passengers will be of all nationalities  
 Music, Art, Current Events  
 Because she will deal with persons of varying tastes  
 Geography  
 Because travel is her business  
 Physical Education  
 Because good health is required to pass the entrance physical examination and to carry out her duties as a flight crew member  
 This same airline continues as follows:

"If selected, she will attend a training school, during which time she will be furnished room, board, and classroom equipment. Upon successful completion of the training program she will be considered for employment and, if accepted, will be assigned a base station."

## AIRLINE OFFICE TRAINING

There are openings for women reservationists, ticket agents, and secretaries. Students who wish to specialize in one of these branches should enroll in a business curriculum (See pp. 26-30), choosing electives from the following: Accounting, Business Law, Filing, Machine Calculation, Short-hand, Speech, Typing.

## SCIENCE

## INDUSTRIAL CHEMISTRY CURRICULUM

This curriculum is intended for those desiring to spend two years in the study of chemistry and related subjects before seeking employment in the chemical field. Some of these courses may not be transferable to all senior colleges.

## Suggested Courses

First Year			
First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Chemistry 111 or 103	4	Chemistry 112 or 117	4, 5
*Mathematics or other		*Mathematics 151	1
elective	4	Elective	6, 7
Political Science 101, 102,		Physical Education	1
or 103	4, 3		—
Physical Education	1		15, 17 hrs.
—			
16, 15 hrs.			

## INDUSTRIAL CHEMISTRY Continued

## Second Year

Third Semester		Fourth Semester	
Chemistry 221 or 225	4	Chemistry 225 or 222	
Physics 101	4	and 223	4, 6
Electives	8	Physics 102	4
	—	Electives	6, 8
	16 hrs.		—
			15, 17 hrs.

\*Students in this curriculum should elect mathematics each semester if necessary until they have completed the mathematics sequence through trigonometry, (See p. 90).

Recommended electives: Biology 105; Business 101, 251, 252; Economics 111, 112; Psychology 201, 203; Shop 111; Sociology 201, 202; Speech 125.

## VOCATIONAL AND INDUSTRIAL TRAINING

## APPRENTICESHIP AND RELATED CURRICULA

The College offers Apprenticeship Programs in the following fields: bricklaying, carpentry, electricity, iron working, plumbing, and sheet metal working. These courses are offered in close co-operation with the Vocational Department of the Bay City Public Schools and the various Joint Apprenticeship Committees. Admission is restricted and is open only to apprentices indentured to one of these trades. The courses are numbered Bricklaying (Shop 31-36); Carpentry (Shop 41-46); Electricity (Shop 51-56); Iron Working (Shop 61-66); Plumbing (Shop 71-76); Sheet Metal Working (Shop 81-86). For further information consult the Vocational Department of the Bay City Public Schools.

Auto Mechanics (Shop 21-26); Machine Shop (Shop 17 and 18), and Tool and Die Apprenticeship (Shop 101-106) are offered to the apprentices in the trades named. Apprentices must be working in the trade to qualify for enrollment. Under certain circumstances apprenticeable draftsmen may have special courses established for them. For further information consult the Vocational Department of the Bay City Public Schools.

Shop Technology courses (Shop 13-14-15-16) are designed for upgrading employed persons. These courses are offered in sequence. Admission is secured upon application to the Vocational Department of the Bay City Public Schools or to the Evening College. For further information consult the Vocational Department of the Bay City Public Schools.

## SHOP CURRICULA

Curricula for students interested in auto mechanics, welding, and machine shop will be especially designed upon application to the Vocational Department, the Evening College, or the Dean of Men of the College.



**"B" CURRICULA****ARCHITECTURE AND DESIGN CURRICULA****ARCHITECTURE CURRICULUM**

University of Michigan

**Suggested Courses****First Year****First Semester**

English 101	3
Architecture 101 . . .	2
Art 101 . . . . .	3
Mathematics 159 . . .	4
Physics 101 . . . . .	4
Physical Education .	1

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17 hrs.**Second Semester**

English 102 . . . . .	3
Architecture 102 . . . . .	2
Art 102 . . . . .	3
Mathematics 160 . . .	4
Physics 102 . . . . .	4
Physical Education .	1

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17 hrs.**DESIGN CURRICULUM**

For students seeking careers in such fields as product design or commercial advertising there are ample opportunities. The following courses are suggested as helpful: Art 101, 102, 105, 106, 108, 109, and 135. Detailed curriculum must be worked out according to the particular college to which the student plans to transfer. (See distribution requirements on pp. 21-24.)

**LANDSCAPE ARCHITECTURE and CITY PLANNING CURRICULUM**

University of Michigan

This is a suggested schedule for the first two years of a professional program.

**Suggested Courses****First Year****First Semester**

English 101 . . . . .	3
Architecture 101 . . .	2
Art 101 . . . . .	3
Geology 101 . . . . .	4
Mathematics 121 . . .	3
Physical Education .	1

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16 hrs.**Second Semester**

English 102 . . . . .	3
Architecture 102 . . .	2
Art 102 . . . . .	3
Geology 102 . . . . .	4
Mathematics 141 . . .	3
Physical Education .	1

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16 hrs.**Second Year****Third Semester**

Art 135 . . . . .	3
Biology 121 . . . . .	4
Economics 201 . . . .	3
Physics 101 . . . . .	4
Political Science 101 .	4

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18 hrs.**Fourth Semester**

Art 108 . . . . .	2
Art 236 . . . . .	3
Economics 202 . . . .	3
Physics 102 . . . . .	4
Political Science 102, 201, or 203 . . . . .	4, 3

---

16, 15 hrs.

## BUSINESS CURRICULA

Business Administration students prepare for business, industrial, and community leadership. Professional goals in business may be directed toward specialized areas: accounting, retailing, finance, marketing, insurance, real estate, secretarial administration, and public administration. The two-year sequence of courses provides general background, principles of business, and some of the tool subjects. Students who wish to take business courses for transfer to other colleges and universities should consult the catalogues of the colleges of their choice and plan their programs carefully in conference with their advisers.

### BUSINESS ADMINISTRATION CURRICULA

#### University of Michigan

Students who plan to apply for admission to the School of Business Administration should follow a program of study similar to the pre-business curriculum offered by the College of Literature, Science, and the Arts. This curriculum requires a total of sixty credit hours, forty of which are to be selected from the distribution courses (See p. 23) and are to include:

English 101, 102 — 6 hrs.

Foreign language or humanities (English 223, 224; 231, 232; Art 105, 106; Music 151, 152, 251, 252) 6 to 8 hrs.

Principles of Economics 201, 202 — 6 hrs.

Mathematics 8 hrs. or Mathematics 4 hrs. and a two-semester sequence of 8 hrs. in Physics, Chemistry, Biology, or Geology.

#### Suggested Courses

English 101, 102 . . . . .	6 hrs.
Political Science 101, 102 . . . . .	8
*Mathematics 141 . . . . .	3
Science . . . . .	8
History 101, 102 or 201, 202 . . . . .	6, 8
English 223, 224 or 231, 232 . . . . .	6
Economics 201, 202 . . . . .	6
**Business 101 . . . . .	2
Accounting 201, 202 . . . . .	8
Physical Education 101, 102 . . . . .	2
Electives to total 62 credit hours	

\*Mathematics 141 is required. Note prerequisites.

\*\*Substitute an elective if typing skill has been achieved.

## BUSINESS ADMINISTRATION Continued

## Michigan State University

The following two-year program will meet the requirements of the Basic College and of the Core Curriculum in Business Administration. \*(See M.S.U. Basic College requirements on p. 22).

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
*Humanities	3, 4	Business 161	3
Political Science 101	4	Geography 103	4
*Science	4	Mathematics 121 or 141	3
Physical Education	1	*Science	4
		Physical Education	1
<hr/>		<hr/>	
15, 16 hrs.		18 hrs.	

## Second Year

Third Semester		Fourth Semester	
Accounting 201	4	Accounting 202	4
Economics 201	3	Economics 202	3
*Humanities	3	**History 202 or 203	3
*Speech 125	3	*Humanities	3
Elective	3	Elective	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

\*\*History 203 preferred.

Psychology 201 and English 201 recommended as electives.

## Western Michigan University

\*See Western Michigan University distribution requirements on p. 24.

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
*History 101	4	*History 102	4
Mathematics 121	3	Mathematics 141	3
*Science	4	*Science	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
15 hrs.		15 hrs.	

## BUSINESS ADMINISTRATION Continued

## Second Year

Third Semester		Fourth Semester	
English 116	3	Accounting 112 or 202	3, 4
Accounting 111 or 201	3, 4	Economics 202	3
Business Statistics 186	3	Major or minor requirements	3
Economics 201	3	*Political Science 101, 102, 103	4, 3
*Humanities	3	*Humanities	3
Physical Education	1	Physical Education	1
<hr/> 16, 17 hrs.		<hr/> 18, 17 hrs.	

## Wayne University

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
*Biology 105, Chemistry 103 or 111, Geology 101, Physics 101	4	*Chemistry 104 or 112, Geology 102, Geography 103, or Physics 102	4
Political Science 101	4	Political Science 102	4
Elective	4	Business 102	2
Physical Education	1	Business 161	3
<hr/> 16 hrs.		Physical Education	1
		<hr/> 17 hrs.	

\*A sequence should be chosen. Biology and Geography constitute one sequence.

## Second Year

Third Semester		Fourth Semester	
Accounting 201	4	Accounting 202	4
Business 271	3	Business 186	3
Economics 201	3	Economics 202	3
English 223, 224, 231, 232, or 241	3	English 223, 224, 231, 232, or 241	3
Speech 221	3	Elective	3
<hr/> 16 hrs.		<hr/> 16 hrs.	



## BUSINESS ADMINISTRATION Continued

## University of Detroit

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101 . . .	3	English 102 . . .	3
Accounting 111 . . .	3	Accounting 112 . . .	3
French, German, Spanish, or elective . . .	4	Geography 103, French, German, or Spanish . . .	4
Mathematics 141 . . .	3	Business 186 . . .	3
Speech 125 . . .	3	Political Science 101 or 102 . . .	4
Physical Education . . .	1	Physical Education . . .	1
<hr/>		<hr/>	
17 hrs.		18 hrs.	

## Second Year

Third Semester		Fourth Semester	
Accounting 261 . . .	3	Accounting 263 . . .	3
Business 251 . . .	3	Business 252 . . .	3
Economics 201 . . .	3	Economics 202 . . .	3
Philosophy 230 . . .	4	Business 271 . . .	3
Political Science 101 or 102 . . .	4	Psychology 201 . . .	4
<hr/>		<hr/>	
17 hrs.		16 hrs.	

## Central Michigan College

See Central Michigan distribution requirements on p. 22.

## Suggested Courses

First Semester		Second Semester	
English 101 . . . . .	3	English 102 . . . . .	3
Geography 101 . . . . .	4	Business 102 . . . . .	2
Biology 105 or . . . . .		Mathematics 101 or 141 . . . . .	3
Physiology 101 . . . . .	4	Speech 125 . . . . .	3
Political Science 101 or 102 . . . . .	4	Electives in Business . . . . .	
Physical Education . . . . .	1	or *2nd Minor . . . . .	4
<hr/>		Physical Education . . . . .	1
16 hrs.		<hr/>	
		16 hrs.	

## Second Year

Third Semester		Fourth Semester	
Accounting 111 or 201 . . . . .	3, 4	Accounting 112 or 202 . . . . .	3, 4
Business 251 . . . . .	3	Business 252 . . . . .	3
Economics 201 . . . . .	3	Economics 202 . . . . .	3
Elective in Business . . . . .	2, 3	Electives in Business . . . . .	
Elective in English . . . . .	3	or *2nd Minor . . . . .	5
Physical Education . . . . .	1	Physical Education . . . . .	1
<hr/>		<hr/>	
15, 17 hrs.		15, 16 hrs.	

\*One minor must be in Economics.

## BUSINESS ADMINISTRATION Continued

## HOTEL MANAGEMENT CURRICULUM

Michigan State University

\*See M.S.U. Basic College requirements on p. 22.

## Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Accounting 111	3	Accounting 112	3
*Science	4	*Science	4
*Political Science	4	*Geography 103	4
Physical Education	1	*Speech 125	3
		Physical Education	1
	15 hrs.		18 hrs.

Third Semester		Fourth Semester	
English 116	3	Psychology 201	4
Business 251	3	Business 252	3
Economics 201	3	Economics 202	3
*Humanities	3	Humanities	3
*History 101	4	Elective	3
Physical Education	1	Physical Education	1
	17 hrs.		17 hrs.

## EDUCATION CURRICULA

Students are admitted to schools of education as juniors after two years of satisfactory work in liberal arts. At Bay City Junior College the student should give attention to completing the basic distribution requirements of the senior college which he will attend. See pp. 21-24 for distribution requirements of four State colleges and universities. He also should select some of his electives in terms of the major or minor fields which he will follow. (See p. 24).

English 101, 102; Speech 125 or 221; Political Science 101, 102, or 103; and Psychology 201 are basic and should be taken in Junior College. Most colleges require a full year of laboratory science: biology, chemistry, geology, or physics. Most church-related colleges, including Albion, Alma, Aquinas, University of Detroit, Hope, Kalamazoo, and Olivet require two years of foreign language or a language competency equal to two years of college study. Other colleges, including the University of Michigan, require a similar language competency for the Bachelor of Arts or Science degrees, but the degrees of Bachelor of Arts or Science in Education may be obtained without foreign language.

Students who plan to receive teaching certificates from the University of Michigan may graduate from either the College of Literature, Science, and the Arts or the School of Education. Those graduating from the College of L.S.A. must take a six-hour sequence of philosophy or mathematics and achieve a proficiency equal to two years of college work in foreign language. Those who elect to graduate from the School of Education need not fill the philosophy, mathematics, or foreign language requirements.

## EDUCATION CURRICULA Continued

## Central Michigan College

See p. 22 for distribution requirements.

## Suggested Courses

First Year		Second Semester	
First Semester			
English 101 . . . . .	3	English 102 . . . . .	3
Geography 101 . . . . .	4	Mathematics 101 . . . . .	3
Physiology 101 or Biology 105 . . . . .	4	Political Science 101 or 102 . . . . .	4
Elective . . . . .	4	Elective . . . . .	4
Physical Education . . . . .	1	Physical Education . . . . .	1
	<hr/>		<hr/>
	16 hrs.		15 hrs.
Second Year		Fourth Semester	
Third Semester			
Psychology 201 . . . . .	4	Art 111 . . . . .	3
Sociology 201 . . . . .	3	Speech 125 . . . . .	3
Electives . . . . .	8	Electives . . . . .	9
Physical Education . . . . .	1	Physical Education . . . . .	1
	<hr/>		<hr/>
	16 hrs.		16 hrs.

Electives suggested by Central Michigan College include Geography 102, 106, and Sociology 202.

## Michigan State University

\*See M.S.U. Basic College requirements on p. 22.

## Suggested Courses

First Year		Second Semester	
First Semester			
English 101 . . . . .	3	English 102 . . . . .	3
Political Science 101 . . . . .	4	Political Science 102 . . . . .	4
*Science . . . . .	4	*Science . . . . .	4
Elective . . . . .	4	Elective . . . . .	4
Physical Education . . . . .	1	Physical Education . . . . .	1
	<hr/>		<hr/>
	16 hrs.		16 hrs.
Second Year		Fourth Semester	
Third Semester			
*History 101 . . . . .	4	*History 102 . . . . .	4
Psychology 201 . . . . .	4	*Humanities . . . . .	3
Sociology 201 . . . . .	3	*Speech 125 . . . . .	3
*Electives . . . . .	4, 5	*Electives . . . . .	5, 6
Physical Education . . . . .	1	Physical Education . . . . .	1
	<hr/>		<hr/>
	16, 17 hrs.		16, 17 hrs.

Psychology 202 strongly recommended.

## EDUCATION CURRICULA Continued

## University of Michigan

The student should note particularly that the School of Education distribution requirements are not identical with those of the College of Literature, Science, and the Arts. See p. 23.

## Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Social Science	4	Social Science	4
Political Science 101 or 102	4	Science	4
Science	4	Elective	4
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	16 hrs.		16 hrs.
Second Year		Fourth Semester	
Third Semester			
English 223, 224, 231, 232, or 241	3	English 223, 224, 231, 232, or 241	3
Psychology 201	4	Psychology 202	3
Speech 221	3	*Electives	9, 10
*Electives	4, 6		<hr/>
	<hr/>		15, 16 hrs.
	14, 16 hrs.		

\*United States History (201, 202) strongly recommended.

## ART EDUCATION CURRICULUM

This program trains the student as a creative artist and at the same time gives him the experience required to specialize in the teaching of art at the elementary or high school level. The specific courses must be worked out in terms of the senior college to which the student plans to transfer (See distribution requirements of some State colleges on pp. 21-24).

## Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Art 101	3	Art 102	3
Art 111	3	Art 112	3
Political Science 101, 102, or 103	4, 3	Electives	6
Electives	3	Physical Education	1
Physical Education	1		<hr/>
	<hr/>		16 hrs.
	17, 16 hrs.		

## Second Year

Art 105, 106, 108, 109, and 135 recommended, with electives depending upon the college to which the student wishes to transfer



## BUSINESS EDUCATION CURRICULA

The curricula for business teachers vary widely among the senior colleges. Courses which are required for graduation in this field in some colleges are acceptable only as electives in others. As the electives in this field are limited, the student is urged to secure the catalogue of the senior college of his choice and check the requirements with his adviser

### Michigan State University

\*See Michigan State University Basic College requirements on p. 22.

#### Suggested Courses

First Year			
First Semester		Second Semester	
English 101 . . . .	3	English 102 . . . .	3
*Biology 105, Physiology 103, Geology 101, Chemistry, or Physics . . . .	4	*Biology 105, Physiology 103, Geology, Chemistry, or Physics . . . .	4
Business 101 . . . .	2	Business 102 . . . .	2
Business 121 . . . .	2	Business 131 and 132 . . . .	2
*Political Science 101 or 102 . . . .	4	*Geography 103 . . . .	4
Physical Education . . . .	1	Physical Education . . . .	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	
Second Year			
Third Semester		Fourth Semester	
English 116 . . . .	3	Accounting 112 . . . .	3
Accounting 111 . . . .	3	Business 112 . . . .	4
Business 111 . . . .	4	Economics 202 . . . .	3
Economics 201 . . . .	3	*Humanities . . . .	3
*Humanities . . . .	3	*Speech 125 . . . .	3
Physical Education . . . .	1	Physical Education . . . .	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

Electives may be chosen in place of Business 101 and 102 if students show evidence of equivalent skill.

### Central Michigan College

See distribution requirements on p. 22.

#### Suggested Courses

First Year			
First Semester		Second Semester	
English 101 . . . .	3	English 102 . . . .	3
*Business 101 . . . .	2	*Business 102 . . . .	2
Geography 101 . . . .	4	Geography 102 . . . .	4
Mathematics 101 or 141 . . . .	3	Physiology 101 . . . .	4
Political Science 101 or 102 . . . .	4	Speech 125 . . . .	3
Physical Education . . . .	1	Physical Education . . . .	1
<hr/> 17 hrs.		<hr/> 17 hrs.	

## BUSINESS EDUCATION Continued

## Second Year

Third Semester		Fourth Semester	
Accounting 111	3	Accounting 112	3
Business 121	2	Business 112	4
Business 111	4	Business 131 and 132	2
Economics 201	3	Economics 202	3
English 116	3	English 223, 224, 231, 232, or 241	3
Physical Education	1	Physical Education	1
	<hr/> 16 hrs.		<hr/> 16 hrs.

\*Electives may be chosen in place of Business 101 and 102 if student shows evidence of equivalent skill.

## Western Michigan University

\*See Western Michigan University Basic Studies distribution requirements on p. 24.

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
Accounting 111	3	Accounting 112	3
Business 101	2	Business 102	2
*History 101	4	*History 102	4
Mathematics 101 or 141	3	Political Science 101, 102, or 103	4, 3
Physical Education	1	Physical Education	1
	<hr/> 16 hrs.		<hr/> 16, 17 hrs.

## Second Year

Third Semester		Fourth Semester	
*Biology, Geography, Chemistry, Geology, or Physics	4	*Biology, Geography, Chemistry, Geology, or Physics	4
Business 111	4	Business 112	4
Economics 201	3	Economics 202	2
*Humanities	3	*Humanities	3
Physical Education	1	Business 121, 131, or 132	1, 2
	<hr/> 15 hrs.	Physical Education	1
			<hr/> 15, 16 hrs.

\* Electives may be chosen in place of Business 101 and 102 if student shows evidence of equivalent skill.

## INDUSTRIAL ARTS CURRICULUM

### Western Michigan University

The Industrial Arts Curriculum prepares students to teach shop in elementary, junior, and senior high schools. Requirements vary according to the senior college to which the student transfers. (\*For Western Michigan University Basic Studies requirements see p. 24).

#### Suggested Courses \*\*

First Year			
First Semester		Second Semester	
English 101 .	3	English 102	3
Drawing 101 or 151 .	3	Drawing 102 or 152	3
Political Science 101	4	Political Science 102	4
*Science .	4	*Science .	4
Physical Education	1	Shop 111	2
	<hr/>		<hr/>
	15 hrs.		16 hrs.
Second Year			
Third Semester		Fourth Semester	
Drawing 140 or 251	3, 2	Drawing 252 .	3
*History 101 or 201	4, 3	History 102 or 202	4, 3
*Humanities	3	*Humanities .	3
Electives .	4, 6	Electives	4, 6
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	15, 17, hrs.		15, 17 hrs.

\*\*This program presupposes a social science minor

## MUSIC EDUCATION CURRICULUM

This curriculum is designed for students who expect to teach music in the public schools after completing two more years of college elsewhere. They should elect Music 151, 152, 251, and 252 as well as certain applied music courses. Students intending to transfer to Michigan State University must complete the Basic requirements of that College. For distribution requirements of Michigan State University, Western Michigan University, Central Michigan College, and University of Michigan see pages 21-24.

Students should consult the bulletins of the schools to which they expect to transfer for details of their specific programs.

## PHYSICAL EDUCATION CURRICULUM

The curriculum for physical education teachers in the secondary schools follows rather closely the curriculum outlined for other secondary teachers. (See pages 42-44). Care must be taken, however, in selection of majors and minors, as many of the courses required the last two years in senior college will be devoted to physical education. The major and minor requirements differ among various colleges. (See pages 21-24 for distribution requirements of four State Colleges.)

## SPECIAL EDUCATION CURRICULUM

Teachers of special education are trained to teach exceptional children. Such teachers are specialists in the problems of the physically handicapped (including the deaf, blind or partially blind, and speech defectives), the socially maladjusted, and the mentally handicapped.

Any student who desires to teach exceptional children after completing two additional years of college should consult the catalogue of the school to which he intends to transfer and should plan carefully his first two years of work with his adviser (See pages 21-24; 42-44 for helpful information.)

## STATE LIMITED CERTIFICATE CURRICULUM

This curriculum, offered by Bay City Junior College and Central Michigan College, may not be begun after September 1957. Those who already have enrolled in this program must complete it by June 30, 1960. The courses of Bay City Junior College are approved by Central Michigan College and by the State Board of Education. Upon completion of two years of specified work here, followed by six weeks of residence work at Central Michigan College, the graduate is certified to teach in any rural elementary school in this state. A grade point average of C+ (2.5) must be maintained if the student is to remain on this curriculum. This entire program is transferable on a four-year elementary education curriculum at the state teachers' colleges and at the University of Michigan.

State Board Tuition Scholarships are granted students who are accepted for the second year, on condition that following graduation the recipient teach at least one year in a rural school in Michigan. Graduates receive the State Limited Teacher's Certificate.

### Required Program at Bay City Junior College

First Year		Second Year	
Art 111	3	Education 201, 203, 204,	
English 101, 102	6	207, 212	17
Geography 101, 106, or		History 201 or 202	3
Geology 101	4	Sociology 201	3
Mathematics 101	3	Electives	7, 9
Music 111	2		—
Penmanship	0		30, 32 hrs.
Physical Education	2	At Central Michigan College	
Physiology 101	4	Agriculture 101 (or ap-	
Political Science 101 or 102	4	proved substitute)	3
Electives	4, 6	English 204 (Children's	
	—	Literature)	3
	32, 34 hrs.		—
			6 hrs.

The summer work is to be taken following graduation from Junior College.

Electives should be chosen to strengthen teaching background (11 hours or more). Among the recommended electives are History 105, Psychology 201, and Speech 125.



## ENGINEERING CURRICULA

### GENERAL ENGINEERING CURRICULUM

The entering engineering student must present acceptable high school credits in chemistry and physics, and three units in mathematics, including one and one-half units in algebra and one and one-half units of geometry. In addition, one-half unit of trigonometry is advised; if not offered for admission, it must be elected the first semester at Junior College. A student who does not meet the minimum requirements must register in the general academic curriculum. When he has removed all deficiencies, he may apply for transfer to the Engineering Curriculum.

The engineering advisers may make necessary adjustments in the following curricula to meet the requirements of other colleges or special fields of engineering.

#### \*University of Michigan

##### Suggested Courses

First Semester		First Year		Second Semester	
English 101	3	English 102	8		
Chemistry 115 or 125	5, 3	Chemistry 125 or 115	3, 5		
Drawing 101	3	Drawing 102	3		
Mathematics 159	3	Mathematics 151	1		
Speech 101	1	Mathematics 160	4		
Physical Education	1	Speech 102	2		
		Physical Education	1		
	16, 14 hrs.				17 19 hrs.
Third Semester		Second Year		Fourth Semester	
Economics 201	3	Economics 202	3		
Mathematics 211	5	Mathematics 212	4		
Physics 201	5	Physics 202	5		
Political Science 103	3	Physics 205	3		
		Shop 111	2		
	16 hrs.				
					17 hrs.

\*This program also is suitable for Wayne University and University of Detroit.

#### Michigan College of Mining and Technology

##### Suggested Courses

First Semester		First Year		Second Semester	
English 101	3	English 102	3		
Chemistry 111	4	Chemistry 117	5		
Drawing 101	3	Drawing 102	3		
Mathematics 159	3	Mathematics 160	4		
Shop 111	2	Mathematics 151	1		
Physical Education	1	Physical Education	1		
	16 hrs.				17 hrs.

## ENGINEERING CURRICULA Continued

## Second Year

Third Semester		Fourth Semester	
Economics 201	3	Economics 202	3
Mathematics 211	5	Mathematics 212	4
Physics 201	5	Physics 202	5
Political Science	3	Physics 205	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		16 hrs.	

## Michigan State University

The following outline includes subjects which will meet three of the four requirements for the Basic College of Michigan State University.

\*(See page 22). Students must spend at least one summer and two years at M.S.U. to complete this engineering program.

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 115	5	Mathematics 151	1
Drawing 101	3	Mathematics 160	4
Mathematics 159	3	*Speech 102	2
*Speech 101	1	Electives	6
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		17 hrs.	

## Second Year

Third Semester		Fourth Semester	
*Economics 201	3	*History 105 or 203	2
Mathematics 211	5	Mathematics 212	4
Physics 201	5	Physics 202	5
*Political Science 103	3	*Physiology 103	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		16 hrs.	

## HOME ECONOMICS CURRICULA

## Michigan State University

In addition to the M.S.U. Basic College requirements (see p. 22), all Home Economics programs require Biology 111, Science 201, and a course in economics.

Additional courses recommended vary with the specific major as indicated on next page:

### HOME ECONOMICS TEACHING

To prepare for teaching homemaking in both reimbursed and non-reimbursed schools in Michigan. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112

Chemistry 222, if Chemistry minor is desired

Economics 111

History 201, 202 and Political Science 101, 102 for social science minor

Psychology 201, 202

### CHILD DEVELOPMENT AND TEACHING

To prepare for teaching in nursery schools, kindergartens, and primary schools of Michigan. Courses applying to this major, in addition to those listed for all majors, are:

Economics 111

Psychology 201, 202

Physiology 103

English 223, 224, 231, 232, 241 and Speech 221 and/or 222 will count toward English and Speech minor for Elementary Certification

### FOODS

To prepare for the profession of commercial worker in foods and nutrition, worker in experimental foods, and writer for women's magazines. Courses applying to this major, in addition to those listed for all majors are:

Chemistry 111, 112, 222, 223

Economics 201

Psychology 201, 202

Suggested electives:

Speech electives

Elementary Physics 101, 102

English 201

Accounting 111, 112 or 201, 202

### NUTRITION

To prepare for advanced work in dietetics in a hospital, clinic, or large food service unit. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112, 222, 223

Psychology 201, 202

Economics 201, 202

Physiology 103

Accounting 111 or 201

### INSTITUTIONAL ADMINISTRATION

To train for managerial positions in school lunchrooms, college cafeterias and residence halls, tearooms, restaurants, and industrial food services. Courses applying to this major, in addition to those listed for all majors, are:

Psychology 201

Chemistry 111, 112

Economics 201, 202

Accounting 111 or 201

## HOME ECONOMICS Continued

### CLOTHING AND TEXTILES — RETAILING

To train for positions in fashion, merchandising, display, promotion, and personnel in retail stores. Courses applying to this major, in addition to those listed for all majors, are:

Psychology 201, 202

Economics 111, 112 or 201, 202

Business 271

### RELATED ART — HOME FURNISHINGS

To train for work in the field of Interior Design in retail stores or design studios. Courses applying to this major, in addition to those listed for all majors, are:

Psychology 201, 202

Economics 111, 112 or 201, 202

Art 101, 102, 108, 109

### HOME ECONOMICS EXTENSION

To train for work as County Home Demonstration Agent in working with homemakers and youth groups. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112

Economics 111

Psychology 201, 202

OTHER MAJORS in Home Economics include: General Home Economics, with Journalism minor, Research in Foods and Nutrition, General Clothing and Textiles, Dress Design, Textiles. For information about these majors consult Michigan State University catalogue and your adviser

## LIBERAL ARTS CURRICULA

### GENERAL ACADEMIC CURRICULUM

The Liberal Arts Curriculum has a two-fold purpose: It is designed to provide either a general, liberal education or the necessary cultural background for certain specialized fields such as medicine, journalism, education, library science, and law. The basic requirements for most of the major fields of specialization can be met by enrolling in a liberal arts program.

Since senior institutions have different basic requirements, the student should check carefully to make sure that his program satisfies the requirements of the senior college or university of his choice. (See pp. 21-24 for the basic requirements of the University of Michigan, Michigan State University, Central Michigan College, and Western Michigan University.) In general, a liberal arts program follows the pattern given on the following page:



## GENERAL ACADEMIC Continued

Suggested Courses			
First Year		Second Year	
English 101, 102	6	*Foreign Language	8
*Foreign Language	8	Literature or Speech	6
Mathematics or Science	8	***Electives	16
Social Sciences	8		
**Physical Education	2		30 hrs.
	<hr/>		
	32 hrs.		

- \* Students are advised to check the language requirements of the degree-granting school to which they will transfer
- \*\* Some schools require two years of physical education.
- \*\*\*As electives the students should select some courses which will be of value to him in the areas of his future specialization.

## PRE-JOURNALISM CURRICULUM

## Michigan State University

"The philosophy of journalism education at Michigan State University lays heavy stress upon the background education for journalism (the sciences, social science, literature, and all other non-journalism fields.) Expert instruction is given in journalistic techniques, but this is considered secondary to the broadest possible backgrounding:" Michigan State University Catalogue, 1956-1957 A Junior College program similar to the following will prepare a student for transfer to Michigan State University. It combines Basic College requirements (\*see p. 22) and background courses.

## Suggested Courses

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
*History 101	4	*History 102	4
Political Science	4	Political Science 102	4
*Science	4	*Science	4
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	16 hrs.		16 hrs.
Second Year			
Third Semester		Fourth Semester	
Economics 111 or 201	3	Economics 112 or 202	2
*Humanities	3	History 202, 203, or 211	3
History 201	3	*Humanities	3
Sociology 201	3	Psychology 201	4
*Speech 125	3	Elective	3
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	16 hrs.		16 hrs.

Students planning to go into reporting or editorial work should take at least two semesters of a foreign language.

## PRE-JOURNALISM CURRICULUM

### University of Michigan

The first two years of the journalism program at the University of Michigan consists of courses to meet distribution requirements of the College of Literature, Science, and the Arts plus elections in the social sciences.  
 \*(See p. 23).

#### Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
*Foreign Language	4	*Foreign Language	4
*Science	4	*Science	4
Political Science	4	Political Science 101,	
Physical Education	1	201 or 203	4, 3
		Physical Education	1
<hr/>		<hr/>	
16 hrs.		16, 15 hrs.	
Second Year			
Third Semester		Fourth Semester	
*Mathematics or Philosophy	3	*Mathematics or Philosophy	3
*Foreign Language	4	*Foreign Language	4
Economics 201	3	Psychology 201	4
History 101	4	History 102	4
Speech 221	3		
<hr/>		<hr/>	
17 hrs.		15 hrs.	

## PRE-LAW CURRICULUM

Admission requirements vary among law schools; the student is therefore advised to secure the catalogue of the law school of his choice and check the requirements carefully. A suggested program such as the following generally will meet the requirements of the first two years.

First Year		Second Semester	
First Semester		Second Semester	
English 101	3	English 102	3
History 101	4	History 102	4
Laboratory Science	4	Laboratory Science	4
Physical Education	1	Physical Education	1
Elective	3, 4	Elective	3, 4
<hr/>		<hr/>	
15, 16 hrs.		15, 16 hrs.	

## PRE-LAW CURRICULUM Continued

Second Year			
Third Semester		Fourth Semester	
Economics 201 . . .	3	Economics 202 . . .	3
History 201	3	History 202, 203 or 211 .	3
Mathematics, or other subject allowed as a substitute	3, 4	Mathematics, or other subject allowed as a substitute .	3, 4
Electives	6, 7	Electives	6, 7
<hr/> 15, 16 hrs.		<hr/> 15, 16 hrs.	

Suggested electives: English 201 (Advanced Composition); English (Literature) 223, 224, 231, 232, 241; Foreign Language; Geography 101, 102; History 211; Political Science 101, 102, 201, 203; Psychology 201, 203; Sociology 201, 202; Speech 221, 223.

## LIBRARY SCIENCE CURRICULUM

The study of library science offers opportunities in a variety of fields such as college and university, county, public school, and special libraries. While technical courses in library science usually are not offered before the junior year, the first two years of college study in liberal arts are an important period in preparation for librarianship. (See Liberal Arts on pp. 52-53). The student should have some knowledge of foreign language, preferably French and German, and the ability to use the typewriter with ease. It is of utmost importance that the student talk with his adviser in order to meet the distribution requirements of the senior college to which he plans to transfer. The distribution requirements of Michigan State University, Western Michigan University, University of Michigan, and Central Michigan College may be found on pp. 21-24.

## MEDICAL AND HEALTH CURRICULA

## PRE-DENTAL CURRICULUM

Requirements for admission to a school of dentistry include at least two years (60 semester hours) of pre-dental work. In no case is a student recommended from this college who has an average of less than C+ (2.5) grade.

A student planning to enter dentistry should contact the dean of the dental school for which he is making application no later than one year before expected date of enrollment.

All applicants for dental school are required to take the National Dental Aptitude Test. Information on this examination may be secured from the Aptitude Test Division, Council on Dental Education, American Dental Association, 222 East Superior Street, Chicago, Illinois. It is advisable to take this test at an early date.

## PRE-DENTAL CURRICULUM Continued

## UNIVERSITY OF MICHIGAN

## Suggested Courses

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 111	4	Chemistry 112	4
Political Science 101	4	Elective	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	
Second Year			
Third Semester		Fourth Semester	
Physics 101	4	Chemistry 222, 223	6
Electives	11	Physics 102	4
		Electives	5
<hr/>		<hr/>	
15 hrs.		15 hrs.	

While there are not other specific subject requirements, the following are suggested electives: English Literature, Foreign Language, History, Political Science, Economics, Sociology, Mathematics, Speech, Philosophy, Psychology, and Fine Arts. This program is identical with that recommended by the University of Detroit and by Marquette University.

## DENTAL HYGIENE CURRICULUM

## University of Michigan

## Four-Year Degree Program

Candidates must complete with satisfactory grades sixty hours of college credit on a program that would admit them to a field of concentration leading to a degree in the College of Literature, Science, and the Arts. (See p 23 for distribution requirements.) In this pre-professional training the following subjects should be included: Psychology 201, 202; Sociology 201, 202; Biology 111; Chemistry 111, 112 if high school chemistry grade was not A or B. It is desirable that a candidate have some practical experience as an assistant in a dental office before enrolling in dental hygiene at the University. Typing and bookkeeping are not required for entrance credit, but it is urged that students who do not have a working knowledge of these subjects enroll for these courses during the summer.

Admission to these programs is limited, and a personal interview with the Director of the Dental Hygiene program of the University is required.

## Two-Year Course

Some students choose to attend Bay City Junior College for one year before entering the two-year University Dental Hygiene program. Their chances of being accepted and of succeeding in it are considerably enhanced because of their added maturity and training.



## PRE-MEDICAL CURRICULA

## University of Michigan

Ninety semester hours of pre-medical work is required for admission to all medical schools. Sixty semester hours may be taken at Junior College. Many students seek admission to the Medical School after graduation from the College of Literature, Science, and the Arts. \*See University of Michigan distribution requirements on p. 23

## Suggested Courses

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 215 or elective	4
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
*Foreign Language or elective	4	*Foreign Language or elective	4
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	16 hrs.		16, 17 hrs.
Second Year			
Third Semester		Fourth Semester	
Chemistry 221 or 225 or elective	4	Chemistry 222 or elective	4
*Foreign Language or Political Science 101	4	Chemistry 223 or elective	2
Mathematics 157 or elective	3	*Foreign Language or Social Science	4
Physics 101 or elective	4	Mathematics 159 or elective	3
	<hr/>	Physics 102 or elective	4
	15 hrs.		<hr/>
			17 hrs.

Philosophy may be substituted for mathematics.

\*Foreign Language requirements: sufficient to reach proficiency equivalent to level of four semesters of a language.

The University recommends that Physics 101 and 102 or Chemistry 222 and 223 or Biology 215 be deferred until the third year

## Wayne University

## Suggested Courses

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 215 or elective	4
Chemistry 103 or 111	4	Chemistry 117	5
Foreign Language or elective	4	Foreign Language or elective	4
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	16 hrs.		17 hrs.

## PRE-MEDICAL CURRICULA Continued

## SECOND YEAR

Third Semester		Fourth Semester	
Chemistry 225	4	Chemistry 222	4
Physics 101 or Foreign Language	4	Chemistry 223 or elective	2
Mathematics or elective	3, 4	Physics 102 or Foreign Language	4
Political Science 101 or 102	4	Social Science	4
		Elective	4
<hr/>		<hr/>	
15, 16 hrs.		16, 17 hrs	

## MEDICAL TECHNOLOGY CURRICULUM

## University of Michigan

This program is designed for students who may wish to obtain a bachelor's degree and a certificate in medical technology from the University of Michigan. The work of the first two years may be taken at Junior College, the third year partly in Medical School and partly in the College of Literature, Science, and the Arts. The fourth year is devoted to practical training in the laboratories of the University Hospital. \*For University of Michigan distribution requirements see p. 23. Other colleges also offer programs in Medical Technology. For details, the student should confer with his adviser

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
*Foreign Language or elective	4	*Foreign Language or elective	4
Mathematics 157 or elective	3	Mathematics 159 or 141 or other electives	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
15 hrs.		15, 16 hrs.	

## Second Year

Third Semester		Fourth Semester	
Biology 111	4	Biology 205	4
Chemistry 221 or 225	4	Chemistry 222	4
*Foreign Language or elective	4	*Foreign Language or elective	4
Political Science 101 or 102	4	*Social Science	4
<hr/>		<hr/>	
16 hrs.		16 hrs.	

Philosophy may be substituted for mathematics. One semester of college mathematics is required. Foreign language requirements: sufficient to reach proficiency equivalent to level of four semesters of language.

## MORTUARY SCIENCE CURRICULUM

Mortuary Science includes both embalming and funeral directing. A license to practice Mortuary Science is required in Michigan. The Michigan State Board of Mortuary Science has set educational requirements which must be met before a license can be granted. These educational requirements include 60 semester hours of academic college work. Thirty of the 60 semester hours must be taken in definitely specified subjects. Thirty may be taken from suggested electives.

## Wayne University

## Suggested Courses

## First Year

## First Semester

English 101 . . .	3
Biology 111	4
Chemistry 103 or 111	4
Political Science 101, 102 or 103	4, 3
Physical Education .	1
<hr/>	

16, 15 hrs.

## Second Semester

English 102	3
Chemistry 104 or 112	4
Mathematics 101	3
Physiology 103	4
Physical Education	1
<hr/>	

15 hrs.

## Second Year

## Third Semester

Accounting 111 or 201	4
Economics 111 or 201	3
History 201 or 202 . .	3
Psychology 201 . .	4
Speech 125 or 221 .	3
<hr/>	

17 hrs.

## Fourth Semester

Biology 215	4
Business 161	3
Chemistry 222 .	4
English 223, 224, 231, 232, or 241	3
Elective	2, 3
<hr/>	

16, 17 hrs.

## NURSING CURRICULA

University of Michigan and Wayne University

### Four Year Degree Program

Students must transfer after one year at Bay City Junior College and begin work at the University of Michigan or Wayne University the following summer.

#### Suggested Courses

First Semester		First Year		Second Year	
English 101	3	English 102	3		
Chemistry 111	4	Chemistry 112	4		
Sociology 201	3	Psychology 201	4		
*Electives in Humanities and/or Social Science	6	*Electives in Humanities and/or Social Sciences	5		
Physical Education	1	Physical Education	1		
	<hr/>		<hr/>		
	17 hrs.		17 hrs.		

\*For explanation see p. 22

\*For explanation see p. 23.

## NURSING

Michigan State University

### Four-Year Degree Program

Students must transfer at the end of the first year at Bay City Junior College. \*For distribution requirements at Michigan State University see p. 22.

#### Suggested Courses

First Semester		First Year		Second Semester	
English 101	3	English 102	3		
Biology 111	4	Chemistry 112	4		
Chemistry 111	4	Biology 205	4		
Political Science	4	Psychology 201	4		
Physical Education	1	*Speech 125 or 221	3		
	16 hrs.	Physical Education	1		
			19 hrs.		

## OCCUPATIONAL THERAPY CURRICULUM

Occupational therapy is treatment through guided activity, mental or physical, specifically prescribed, to hasten recovery from disease or injury. Occupational therapists practice under the guidance of physicians in civilian and governmental hospitals and rehabilitation centers. Degrees with a major in Occupational Therapy are offered at a number of schools within the State.

Students may transfer at the end of two years at Bay City Junior College and after two more years receive both the Occupational Therapy Diploma and the degree of Bachelor of Science.



## OCCUPATIONAL THERAPY Continued

## Western Michigan University

\*For Western Michigan University Basic Studies requirements see p. 24.

## Suggested Courses

## First Year

First Semester		Second Semester	
English 101 . . . . .	3	English 102 . . . . .	3
Art 111 . . . . .	3	Art 112 . . . . .	3
Biology 111 . . . . .	4	Biology 112 . . . . .	4
*Political Science 101 or 102	4	Music 111 . . . . .	2
Physical Education . . . . .	1	Elective . . . . .	2, 3
	—	Physical Education . . . . .	1
	15 hrs.		15, 16 hrs.

## Second Year

Third Semester		Fourth Semester	
*Art 105 . . . . .	3	Art 108 . . . . .	2
*Geography 101 . . . . .	4	Biology 215 . . . . .	4
*Humanities . . . . .	3	*Psychology 201 . . . . .	4
*Sociology 201 . . . . .	3	*Electives . . . . .	6
*Speech 125 or 221 . . . . .	3	Physical Education . . . . .	1
Physical Education . . . . .	1		—
	17 hrs.		17 hrs.

Eastern Michigan College suggests deferring Biology 215 until the Junior year and electing History 101, 102 at Junior College.

## PRE-OPTOMETRY CURRICULUM

The requirements for admission to the schools and colleges of optometry are not identical. Typically, the requirements include courses in English, mathematics, physics, chemistry, and biology or zoology. Some schools and colleges have varied requirements in psychology, the social sciences, literature, philosophy, and foreign languages. The student should check specific course requirements of the college to which he plans to transfer.

The pre-optometry requirements represent a minimum of two academic years of study, all of which may be taken on this campus. Students must have a grade of not less than C (2.0) for all pre-optometric work.

Direct individual inquiries are invited by the American Optometric Association, Department of Public Information, 4030 Chouteau Avenue, St. Louis 10, Missouri.

## PRE-OPTOMETRY Continued

## Illinois College of Optometry

## Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Mathematics 121	3	Mathematics 157	3
Political Science 101, 102, or 103	4, 3	Electives	6
Elective	3	Physical Education	1
Physical Education	1		17 hrs.

18, 17 hrs.

## Second Year

Third Semester		Fourth Semester	
Chemistry 111	4	Physics 102	4
Physics 101	4	Psychology 202	3
Psychology 201	4	Electives	9
Elective	4		16 hrs.

16 hrs.

Suggested electives for optometric colleges include Social Science, Literature, and Foreign Language.

## PRE-PHARMACY CURRICULUM

The Michigan Board of Pharmacy at present allows only one year of advanced credit from a non-pharmacy college. However, a student who presents additional credits in transfer will not be required to repeat courses. In 1959 pharmacy will become a five-year program. Pharmacy students then will be permitted to complete two years of pre-pharmacy before entering the College of Pharmacy of the University of Michigan. Students who enroll in pharmacy prior to 1959 will complete the regular four-year program now in operation. Students with one or more years of advanced standing who enter in 1958 also will be able to complete the regular four-year program.

## University of Michigan

## Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 111	4	Chemistry 112	4
Mathematics 121 or 159	3	Electives	5, 6
Physical Education	1	Physical Education	1

15 hrs.

17, 18 hrs.

Suggested electives include courses in Social Science, Literature, and Foreign Language.

## PRE-PHARMACY Continued

## Ferris Institute

## Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 103 or 111	4	Chemistry 117	5
Physiology 103	4	Mathematics 121, 141 or 157	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	

Wayne University  
Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 103 or 111	4	Chemistry 117	5
Political Science 103	3	Mathematics 157	3
Mathematics 121	3	Physical Education	1
<hr/>		<hr/>	
17 hrs.		16 hrs.	

## PHYSICAL THERAPY CURRICULUM

Physical therapy is that part of medical science concerned with the treatment of disease or injury by physical means such as heat, light, water, electricity, massage, and therapeutic exercise. It includes "therapeutic teaching" as well as the administration of physical treatment procedures. Students entering upon this curriculum from high school should have completed one unit of algebra and one unit of geometry. Biology, physics, and chemistry are strongly advised.

The American Physical Therapy Association requires the candidate to complete a minimum of 60 semester hours before entering the professional course. Upon completion of the following curriculum at Bay City Junior College the student is eligible for transfer to the professional program at other colleges. An overall average of 2.5 (C+) is required for entrance to the professional course.

## University of Michigan

\*For distribution requirements at the University of Michigan see p. 23.

## Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Chemistry 111	4	Chemistry 112	4
*Foreign Language	4	*Foreign Language	4
Mathematics 141	3	Mathematics 157	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
15 hrs.		15 hrs.	

## PHYSICAL THERAPY Continued

		Second Year	
Third Semester		Fourth Semester	
Biology 111	4	Biology 215	4
*Foreign Language	4	*Foreign Language	4
*Humanities	3	*Humanities	3
Psychology 201	4	Political Science 103	3
	—	Psychology 202	3
	15 hrs.		17 hrs.

Those entering college with mathematics deficiencies must take courses in mathematics to fulfill prerequisites for Mathematics 141 (College Algebra).

## PUBLIC HEALTH CURRICULA

## University of Michigan

The curriculum in Public Health has thirteen divisions, among which are Public Health Administration, Public Health Dentistry, Public Health Nursing, Public Health Engineering, Industrial Health, Sanitary Science.

For a list of courses required for admission to any of the thirteen divisions see the catalogue of the School of Public Health of the University of Michigan.

## Michigan State University

\*See Michigan State University Basic College requirements on page 22.

## Suggested Courses

		First Year	
First Semester		Second Semester	
English 101	3	English 102	3
*Biology 111	4	Biology 121	4
*Chemistry 111	4	Chemistry 112	4
Mathematics 157	3	Mathematics 159	3
Physical Education	1	Physical Education	1
	—		—
	15 hrs.		15 hrs.

		Second Year	
Third Semester		Fourth Semester	
Biology 205	4	Chemistry 222	4
Mathematics 160	4	Chemistry 223	2
Physics 101	4	Physics 102	4
*Psychology 201	4	*Political Science 101 or 102	4
Physical Education	1	*Speech 125	3
	—	Physical Education	1
	17 hrs.		—
			18 hrs.



## PRE-VETERINARY CURRICULUM

### Michigan State University

The veterinary course is six years in length, two years of pre-professional and four years of professional study. The following program satisfies the pre-professional curriculum. It includes subjects which fill three of the four Basic College requirements of Michigan State University. \*(See p. 22).

#### Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 215	4
Chemistry 103 or 111	4	Chemistry 112	4
Mathematics 121	3	Mathematics 157	3
Physical Education	1	*Speech 125 or 221	3
	<hr/>	Physical Education	1
	15 hrs.		<hr/>
			18 hrs.
Third Semester		Fourth Semester	
Chemistry 225	4	Chemistry 222	4
*History 101	4	Chemistry 223	2
Physics 101	4	*Geography 103	4
*Political Science 101 or 102	4	*Humanities	3
Physical Education	1	Physics 102	4
	<hr/>		<hr/>
	17 hrs.		17 hrs.

One summer term should be taken at Junior College after the freshman or sophomore year to complete Humanities requirement. A student is not admitted to the professional school if he lacks any required subject or credit. Application for admission to the Veterinary College must be made at the close of the third semester of the Junior College course. A transcript of credits and a list of fourth semester courses must be submitted to M.S.U. at that time.

## NATURAL RESOURCES CURRICULA

### AGRICULTURE CURRICULUM

#### Michigan State University

This program includes the four Basic College courses required at M.S.U. \*(See p. 22).

#### Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Mathematics 121	3	*Geography 103	4
*Political Science 101 or 102	4	Mathematics 157	3
Physical Education	1	Physical Education	1
	<hr/>		<hr/>
	15 hrs.		15 hrs.

## AGRICULTURE CURRICULUM Continued

		Second Year		Fourth Semester	
Third Semester					
Chemistry 103 or 111	4			Chemistry 104 or 112	4
Economics 201	3			Economics 202	3
*History 101	4			*History 102	4
*Speech 125	3			*Humanities	3
Elective	3			Physical Education	1
Physical Education	1				
				<hr/>	
		18 hrs.		15 hrs.	

If the student has had Mathematics 121 and 157, he should take Mathematics 159.

## CONSERVATION CURRICULA

## University of Michigan

The specialized fields of study in the School of Natural Resources at the University of Michigan are Conservation, Fisheries, Forestry, and Wood Technology. The following program will satisfy the requirements of the University of Michigan for the first two years in these specialized fields. Some variation may be necessary.\*

## Suggested Courses

		First Year		Second Semester	
First Semester					
English 101	3			English 102	3
Biology 111	4			Biology 121	4
Geology 101	4			Mathematics 157 or elective	3
Mathematics 121 or elective	3			Speech 125 or 221	3
Physical Education	1			Elective	3
		<hr/>		Physical Education	1
		15 hrs.		<hr/>	
				17 hrs.	
		Second Year		Fourth Semester	
Third Semester					
Chemistry 103 or 111	4			Chemistry 104 or 112	4
Economics 201	3			Economics 202	3
English 223, 224, 231, 232, or 241	3			Political Science 101, 102 or 103	4, 3
Sociology 201	3			Electives	6
Elective	3, 4			<hr/>	
		<hr/>		17, 16 hrs.	
		16, 17 hrs.			

\*Variations: In place of electives in above program

For Fisheries include Physics 101, 4 hrs.

For Forestry and Wild Life Management include Physics 101, 4 hrs., and Drawing 101, 3 hrs.

For Wood Technology include Physics 101 and 102, 8 hrs.; Drawing 101, 3 hrs.; and Accounting 111, 3 hrs. Remove Biology 111, 4 hrs.

## CONSERVATION Continued

## Michigan State University

The specialized programs offered at Michigan State University under the division of Conservation are Fisheries and Wildlife; Forest Products; Lumber and Building Materials Merchandising; Residential Building; Wood Processing and Technology; Packaging Technology; Land and Water Conservation, which includes Rural Land and Water Conservation; and Park Management and Municipal Forestry.

The curriculum offered at Bay City Junior College will satisfy the requirements of Michigan State University in most of these programs. Slight variations may be necessary. The Michigan State University catalogue should be consulted. \*The following program provides for the completion of all four of the Basic courses required at Michigan State University. (See p. 22).

## Suggested Courses

First Year		Second Year	
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 103 or 111	4	Chemistry 104 or 112	4
Mathematics 121	3	Mathematics 157	3
Physical Education	1	*Speech 125	3
	—	Physical Education	1
	15 hrs.		—
			18 hrs.
Second Year		Third Year	
Third Semester		Fourth Semester	
Geology 101	4	*Geography 103	4
*Humanities	6, 7	*Humanities or	
Physics 101	4	History 102	3, 4
Physical Education	1	Physics 102	4
	—	*Political Science 101 or 102	4
	15, 16 hrs.	Physical Education	1
			—
			16, 17 hrs.

## FORESTRY CURRICULUM

## Michigan College of Mining and Technology

## Suggested Courses

First Year		Second Year	
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 103 or 111	4	Chemistry 104, 112, or 117	4, 5
*Mathematics 157 or elective	3	Mathematics 159 or elective	3
Physical Education	1	Physical Education	1
	—		—
	15 hrs.		15, 16 hrs.

## FORESTRY Continued

		Second Year	
Third Semester		Fourth Semester	
Economics 201	3	Economics 202	3
Geography 101	4	Drawing 101	3
Geology 101	4	Political Science 101,	
Physics 101	4	102, or 103	4, 3
Physical Education	1	Physics 102	4
	—	Electives	3
	16 hrs.	Physical Education	1
		—	
		18, 17 hrs.	

\*Students who have completed the equivalent of Mathematics 157 may substitute an elective.

## PUBLIC SERVICE CURRICULA

## POLICE ADMINISTRATION AND PUBLIC SAFETY CURRICULUM

## Michigan State University

The Police Administration curriculum is designed to facilitate the student's entrance as a junior into the Police Administration curriculum of Michigan State University. Before admission to this curriculum the student must have completed one year of high school algebra and one year of geometry or the Junior College equivalents, Mathematics 15 and 21. In addition to the courses which will satisfy the requirements of Michigan State University's Basic Course (see p. 22), there are added requirements for certain divisions of this program. For details refer to M.S.U. catalogue and confer with Junior College adviser

## PUBLIC ADMINISTRATION CURRICULUM

## Michigan State University

The program in Public Administration prepares for employment in a wide variety of positions in national, state, county, and city government. \*(See M.S.U. Basic College requirements on p. 22). Before admission to this curriculum the student must have completed one year of high school algebra and one year of geometry or the Junior College equivalents, Mathematics 15 and 21

## Suggested Courses

		First Year	
First Semester		Second Semester	
English 101	3	English 102	3
*History 101	4	*Humanities	3, 4
Political Science 101	4	Political Science 102	4
*Science	4	*Science	4
Physical Education	1	Physical Education	1
	—		—
	16 hrs.		15, 16 hrs.



## PUBLIC ADMINISTRATION Continued

Second Year			
Third Semester		Fourth Semester	
Accounting 201 .	3	Accounting 202 .	3
Economics 201	3	Economics 202 . .	3
History 201 .	3	History 202, 203, or 211	2, 3
Sociology 201	3	*Humanities	3
*Speech 125 . . . .	3	Psychology 201	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	

## SOCIAL WORK CURRICULUM

A major in Social Work may be obtained in the Liberal Arts division of many four year colleges and universities. A School of Social Work is, however, a graduate school. To prepare for social work, the Junior College student should follow a Liberal Arts program as outlined on pp. 52-53. He should check carefully the distribution requirements of the college to which he plans to transfer (See pp. 21-24 for distribution requirements of four of the State colleges.) He will find the following electives helpful: Economics 111, 112 or 201, 202; History 201, 202; Physiology 103; Political Science 101, 102; Psychology 201, 202; Sociology 201, 202; and Speech 125 or 221 Michigan State University requires Mathematics 121 or 141

## CHEMISTRY CURRICULA

## University of Michigan

\*For distribution requirements see p. 22.

## Suggested Courses

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 103 or 111 .	4	Chemistry 112 or 117 .	4, 5
Mathematics 157 .	3	Mathematics 155	3
Mathematics 159 . .	3	Mathematics 160	3
*Political Science 101		*Political Science 102	
or elective	4	or elective	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
18 hrs.		18, 19 hrs.	

## CHEMISTRY Continued

## Second Year

Third Semester		Fourth Semester	
Chemistry 221 or 225 .	4	Chemistry 222 and 223 or 225	6, 4
*German 111	4	*German 112	4
*Humanities	3	*Humanities	3
Physics 101 or Mathematics 211	4, 5	Physics 102 or Mathematics 212 .	4
	—		—
	15, 16 hrs.		17, 15 hrs.

## Michigan State University

This curriculum is designed to satisfy the requirements of the Chemistry Department and three of the four Basic College courses of Michigan State University. \*(See p. 22).

## First Year

First Semester		Second Semester	
English 101	3	English 102	3
Biology 105 or Physiology 103	4	Chemistry 112 or 117 .	4, 5
Chemistry 103 or 111	4	Mathematics 160	4
Mathematics 157 and 159	6	*Political Science 101 or 102	4
Physical Education	1	Physical Education	1
	—		—
	18 hrs.		16, 17 hrs.

## Second Year

Third Semester		Fourth Semester	
Chemistry 221 or 225 .	4	Chemistry 221 or 223 or 225	6, 4
Mathematics 211 .	5	Mathematics 212 . .	4
Physics 101 or German 111	4	Physics 102 or German 112	4
*Speech 125	3	*Geography 103 or Psychology 201	4
Physical Education	1		—
	—		—
	17 hrs.		18, 16 hrs.

The Humanities Basic required by Michigan State University can be completed in the junior year



## COURSES OF INSTRUCTION

### NUMBERING OF COURSES

Courses numbered under 200 are chiefly for freshmen but may be elected by sophomores. Those from 200 to 299 are intended for sophomores but may be elected by freshmen, by permission of course instructor or adviser. Course descriptions do not state the semester in which courses are offered. The College will release this information each semester in time for the student to plan his program.

### PREREQUISITES

Those courses which have definite prerequisites are so indicated. Otherwise, there is no prerequisite.

The College reserves the right to withdraw any courses for which there are not reasonable enrollments.

### COURSE INDEX

Accounting	72-73	History	89
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Art	73-74	Music	93
Astronomy	75	Nursing	93-94
Biology	75	Nutrition	94
Business	75-78	Philosophy	94
Chemistry	79-81	Physical Education	95-97
Drawing	81-82	Physics	97-98
Economics	83	Physiology and Hygiene	98
Education	83-84	Political Science	98-99
Electronics	84	Psychology	99
English	84-86	Religion	99
Foreign Language	86-88	Shop	100-101
Geography	88	Sociology	102
Geology	88-89	Speech	102



the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1995. The public sector has become a major employer in the UK, and its growth has been a major factor in the overall growth of the economy.

The public sector has also become a major provider of social services, and its growth has been a major factor in the overall growth of the economy. The public sector has become a major provider of social services, and its growth has been a major factor in the overall growth of the economy. The public sector has become a major provider of social services, and its growth has been a major factor in the overall growth of the economy.

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## ACCOUNTING

### 111 Principles of Accounting

**3 hrs. credit**

An introduction to accounting as first applied to a sole proprietorship. The meaning and purpose of accounting; statements; theory of debits and credits; trial balance; journalizing; posting; adjustments and closing entries; notes receivable; prepaid, unearned, and accrued items; depreciation; valuation of accounts receivable; and the voucher system. Journalizing includes use of the general, purchase, sales, cash, and combination journals.

### 112 Principles of Accounting

**3 hrs. credit**

Prerequisite: Acct. 111 A continuation of Acct. 111 Includes payroll, sales, property and income taxes; partnership formation and procedures; corporation formation, records, surplus, dividends, stocks and bonds; departmental and branch accounting; and an introduction to cost accounting. A practice set reviews the voucher system, corporation accounts, and manufacturing cost items.

### 201 Principles of Accounting

**4 hrs. credit**

An introduction to accounting in which the approach is made through the corporate form of business. Methods of recording, reporting, and interpreting the financial data of the business unit are stressed. Includes the income statement and position statement; general ledger; accounts; journals; subsidiary ledgers; cash records; recording of revenues and receivables; and adjusting and closing entries. 6 hrs. weekly.

### 202 Principles of Accounting

**4 hrs. credit**

Prerequisite: Acct. 201 A continuation of Acct. 201 Deals with accounts and notes receivable; discounted notes receivable; discounted notes and bills; merchandising and manufacturing accounts; fixed assets, depreciation, and depletion; consignments and installment sales; partnership; corporate capital accounts; dividends and retained earnings; bonds; and the preparation and interpretation of financial statements. Included are many topics often studied in intermediate courses. 6 hrs. weekly.

### 261 Cost Accounting

**3 hrs. credit**

Prerequisite: Acct. 112. Cost accounting in its relation to factory accounting to classify in detail the cost of production. Discloses inefficiency and indicates profit and loss on each kind of goods or job. A study of departmental process, sequential and job costs, cost records, procedure reports, and the distribution of burden.

### 262 Federal Tax Accounting

**3 hrs. credit**

Prerequisite: Acct. 112. Federal taxation including income, capital stock, excess profits, estate, gifts, and excise taxes.

### 263 Social Security and Payroll Accounting

**3 hrs. credit**

Prerequisite: Acct. 112. Federal Social Security laws and State Unemployment Compensation laws. Questions, problems, and reports sufficient for interpretation and application of these laws to business.

## ACCOUNTING, ARCHITECTURE, ART

**264 Auditing Theory and Procedure****3 hrs. credit**

Prerequisite: Acct. 112. The principles and procedures of auditing, giving special attention to the balance sheet audit, detailed audit, and special investigations.

**ARCHITECTURE****101 Architectural Projections****2 hrs. credit**

Simple projection as applied to plans, sections, and elevations; intersections and developments. 4 hrs. weekly.

**102 Graphics****2 hrs. credit**

Prerequisites: Arch. 101 or equivalent. Architectural perspective, shades, and shadows. 4 hrs. weekly.

**111 Architectural Details****3 hrs. credit**

Elements of planning and construction for small homes in masonry and frame construction. Lettering, symbols and convention, footings, foundation, windows, doors, cornices, stairs. Specifications and cost estimates. 6 hrs. weekly.

**112 Small Home Planning****3 hrs. credit**

Prerequisite: Arch. 111. Development of plans for small house of frame or masonry construction, containing plat, basement, and floor plans; elevations, typical wall section, details, specifications, perspective, and cost estimate. 6 hrs. weekly.

**211 Architecture****3 hrs. credit**

Prerequisite: Arch. 112. Complete scaled model of a house from the student's plans for class demonstration. Landscaping and rendering of the model. Photographs of completed model required. 6 hrs. weekly.

**212 Architecture****3 hrs. credit**

Prerequisite: Arch. 211. Design of a small commercial building (apartment, store, motel, professional, or industrial) complete with all working drawings, details, specifications, and rendered perspective. 6 hrs. weekly.

**ART****101 Freehand Drawing****3 hrs. credit**

A beginning course in art designed for all students interested in creative expression in pencil, pen and ink, and wash. Representation and composition studied by drawing simple forms, in line and value, with introduction of perspective. 6 hrs. weekly.

**102 Drawing and Composition****3 hrs. credit**

Prerequisite: Art 101. Designed to give further understanding of composition and to develop creative ability in drawing. The representation of form with emphasis on values and textures as well as the study of abstract compositions. Problems using charcoal. 6 hrs. weekly.

## ART

**105 History of Western Art** **3 hrs. credit**

A general survey of the history of Western Art from prehistoric times through the 16th century, dealing with outstanding masterpieces and representative artists of the Egyptian, Greek, Roman, Romanesque, Gothic, and Renaissance periods. Emphasis upon architecture and sculpture.

**106 History of Western Art** **3 hrs. credit**

A continuation of Art 105. A general survey of the history of Western Art from the Renaissance through the baroque, neo-classical, romantic, impressionistic, expressionistic, and modern non-objective periods. Emphasis upon painting.

**108 Introduction to Design** **2 hrs. credit**

Prerequisites: Art 101 and 102. The basic elements of design: line, form, space, value, texture, and color experienced through materials in two or three dimensions, using the abstract approach. 6 hrs. weekly.

**109 Introduction to Color** **2 hrs. credit**

Prerequisite: Art 108. Projects and experiments with color in various media. 6 hrs. weekly.

**111 Art Education** **3 hrs. credit**

Introduction to art for prospective teachers. Develops the ability to stimulate the interest of children in art. Uses a wide variety of methods and materials adjusted to various grade levels. 6 hrs. weekly.

**112 Art Education** **3 hrs. credit**

A continuation of Art 111 Further art experiences related especially to upper-grade teaching. 6 hrs. weekly.

**135 Drawing and Painting** **3 hrs. credit**

Prerequisites: Art 101 and 102. Experimentation in water color, oil, tempera, and other media, stressing techniques, composition, and color, based upon studies in still life and landscape. Recommended to students interested in art as a hobby. 6 hrs. weekly.

**223 Design: Commercial or Dress** **2 hrs. credit**

Prerequisites: Art 101, 108, and 109 Commercial Design deals with advertising, layouts of various kinds, projects in packaging and display. Includes air brush technique. Dress Design deals with the principles of dress styling as related to a variety of modern fabrics. Individual expression stressed. 4 hrs. weekly.

**236 Advanced Drawing and Painting** **3 hrs. credit**

Prerequisite: Art 135. Still life, landscape, and non-objective problems in water-color, tempera, and oil. Recommended to students interested in art as a hobby. 6 hrs. weekly.



**ASTRONOMY****101 Elementary Astronomy****1 hr. credit**

A non-mathematical elementary course in astronomy covering terminology and basic principles. Rudiments of the solar system, positions of constellations, important stars, and the movement of planets. Includes use of the Junior College observatory. 2 hrs. weekly.

**BIOLOGY****105 General Biology****4 hrs. credit**

Designed for liberal arts students only. Develops the general principles of plant and animal life. Interrelationship of plant and animal structure, origin and function. Two hours of lectures and discussion and six hours of laboratory weekly.

**111 General Zoology****4 hrs. credit**

Deals with classification, structure, function, environmental relations, origin, and development of animals. Illustrations and application of the scientific method. Two hours of lecture and discussion and six hours of laboratory weekly.

**121 General Botany****4 hrs. credit**

Study of morphology, activities, evolutionary relationships, and economic importance of major plant groups. Two hours of lecture and discussion and six hours of laboratory weekly.

**205 Microbiology****4 hrs. credit**

Prerequisite: Biol. 111 Open only to sophomores. Introduction to micro-organisms: kinds, distribution, and control. Special emphasis given to pathogenic organisms, their sources, modes of infection, and methods of prevention. Two hours of lecture and discussion and six hours of laboratory weekly.

**215 Comparative Anatomy****4 hrs. credit**

Prerequisite: Biol. 111 Open only to sophomores or freshmen with consent of Biology Department. Evolution of the larger taxonomic groups or chordates and a comparative study of their gross morphology. Special emphasis upon dissection of various chordates. Two hours of lecture and discussion and six hours of laboratory weekly.

**BUSINESS****101 Beginning Typewriting****2 hrs. credit**

A mastery of the keyboard and practice in the basic skills and techniques of the touch system of typewriting, for personal or vocational use. 4 hrs. weekly.

## BUSINESS

- 102 Intermediate Typewriting** **2 hrs. credit**  
 Prerequisite: Bus. 101 or its equivalent. Vocational training for general business, accounting, and secretarial students. Special drills for perfecting the techniques necessary for accuracy and speed in typewriting, particularly in business letters, tabulations, reports, and other forms used in business offices. Training in the use of transcribing machines and duplication processes. 4 hr weekly.
- 103 Advanced Typewriting** **2 hrs. credit**  
 Prerequisite: Bus. 102 or its equivalent. The planning and production of a variety of typical business projects, at a rate equivalent to that expected in an office. Advanced drill and copy work to develop speed and accuracy. 4 hrs. weekly.
- 111 Beginning Shorthand** **4 hrs. credit**  
 The principles of Gregg shorthand, including a study of brief forms, vocabulary, and pre-transcription training. 5 hrs. weekly
- 112 Intermediate Shorthand and Dictation** **4 hrs. credit**  
 Prerequisites: Bus. 101 and 111 or their equivalent. Must be accompanied by Bus. 102 or 103. Acquisition of speed in taking dictation and development of transcription skill, speed, and artistic arrangement. Includes grammar review, vocabulary study, and spelling. 5 hrs. weekly.
- 113 Dictation and Transcription** **3 hrs. credit**  
 Prerequisite: Bus. 112. Emphasis is placed upon the development of skills in handling a more difficult vocabulary, the increase of speed of dictation and length of dictation period, as well as an increase in speed and accuracy of transcripts.
- 114 Advanced Dictation and Transcription** **3 hrs. credit**  
 Prerequisite: Bus. 113. Designed to develop high speed in taking and transcribing dictation. Attention given to specialized vocabulary and materials in the reporting, medical, legal, and chemical fields, according to the particular interests of individual students.
- 117 Transportation and Traffic Management** **3 hrs. credit**  
 Designed to provide the information, practice, and techniques necessary to qualify for positions in the Traffic Management Divisions of larger industry. Covers the history of American Transportation System, developments leading to Federal regulation of carriers other than railroads, classification of freight, principles of freight rates and tariffs, shipping documents and their application in freight claims.
- 118 Transportation and Traffic Management** **3 hrs. credit**  
 A continuation of Tran. and Mgmt. 117, dealing with tariff circulars, construction and filing of tariffs, freight rates and tariffs, terminal facilities and switching, demurrage, transit privileges, warehousing and distribution, materials handling and packaging. (See Bus. 217 and 218 for advanced courses.)

## BUSINESS

**\* 121 Machine Calculation****2 hrs. credit**

Students weak in arithmetic should take Math. 101 before electing this course. A laboratory course dealing with the basic operations of such calculating machines as Monroe, Marchant, Comptometer, Burroughs, and the full keyboard and ten-key adding machines. 5 hrs. weekly.

**\* 122 Machine Calculation****2 hrs. credit**

A continuation of Bus. 121, with emphasis on vocational efficiency and speed. 5 hrs. weekly.

**\* 123 Machine Calculation****2 hrs. credit**

Advanced study in machine calculation. Designed particularly for specialization. 5 hrs. weekly.

\* Business 121, 122, 123 may be taken separately or concurrently.

**\*\* 131 Filing****1 hr. credit**

Gives a practical working knowledge of the various systems of filing, indexing, and coding.

**\*\* 132 Filing and Records Management****1 hr. credit**

Prerequisite: Bus. 131 A continuation of the study of filing systems and filing as a basic tool of management. Such factors are considered as equipment and supplies, the use and control of records, and the transfer and disposal of records.

**\*\* 133 Advanced Filing and Records Management****1 hr. credit**

Prerequisite: Bus. 132. A continuation of the study of records management and specific filing problems, with outside readings, field trips, oral and written reports.

\*\* One or more units, Bus. 131, 132, 133 may be taken in one semester

**161 Business Organization****3 hrs. credit**

The organization and forms of business enterprises. Considers promotion, procedure, personnel, and markets.

**176 Advertising****3 hrs. credit**

The fundamental principles of advertising, including types of copy, production media, and the evaluation of advertising media.

**181 Salesmanship****3 hrs. credit**

Emphasis upon sales methods and management. Among major topics are installment selling, mail-order selling, agencies, chain stores, advertising practices, and the psychology of advertising.

**186 Business Statistics****3 hrs. credit**

The ways in which statistical techniques are employed in business. Existing situations are studied.

## BUSINESS

### **217 Transportation and Traffic Management**

**3 hrs. credit**

Prerequisite: At least one semester of Transportation and Traffic Management or its equivalent. A continuation of Tran. and Tr. Mgnt. 117 118, including through-routes and rates, milling in transit, technical tariff and rate interpretation, overcharges and undercharges, losses and damages, import and export traffic, and rate committee procedure.

### **218 Transportation and Traffic Management**

**3 hrs. credit**

A continuation of Tran. and Tr. Mgnt. 217, including evolution of the Interstate Commerce Act, construction of the Interstate Commerce Act, its interpretation and application, procedures and practice before the Interstate Commerce Commission, statutory authority for awarding damages, and a review of the Interstate Commerce Commission's decisions.

### **241 Business Practice**

**3 hrs. credit**

Prerequisites: Bus. 102 or equivalent and Eng. 116. Business Practice is recommended for all business students. Co-ordinates the specialized skills and knowledge acquired in the accounting, general business, and secretarial curricula. The importance of the office in today's economy and the specific office service units are studied from the managerial and the office employee's point of view. Stress is placed upon the human relations element as it applies to efficient, harmonious office procedures in the modern business office. Office practices are integrated primarily through the completion of projects and through the Case Study approach.

### **251 Business Law**

**3 hrs. credit**

A study of contracts (negotiable instruments, employment, bailments), agency, and personal property.

### **252 Business Law**

**3 hrs. credit**

A study of sales, insurance, real property, trusts, partnerships, and corporations.

### **271 Marketing**

**3 hrs. credit**

Prerequisite: Econ. 111 and 112 or 201-202, or consent of the instructor. The general field of marketing and distribution of products. Marketing functions, analyses, recent developments, and determination of prices.

## Related Business Subjects

**English 116 Business Communication** (See p. 85)

**3 hrs. credit**

**English 117 Business Communication** (See p. 85)

**3 hrs. credit**

**Mathematics 101 Business Computation** (See p. 91)

**3 hrs. credit**

**Speech 125** (See p. 102)

**3 hrs. credit**

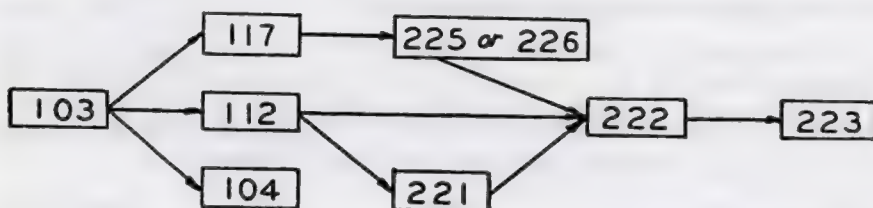


## CHEMISTRY

### SEQUENCES OF CHEMISTRY COURSES

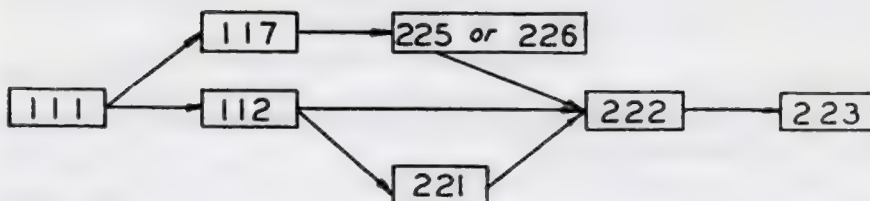
For students entering Junior College

a) With no high school chemistry



Chem. 103 – 104 sequence is not acceptable as a prerequisite for advanced chemistry.

b) With high school chemistry



Above average grades and consent of chemistry department are necessary.

Engineers should consult the catalogues of the senior colleges to which they plan to transfer to determine their chemistry sequences.

One engineering sequence:

Chem. 115 – Chem. 125 or Chem. 125 – Chem. 115.

## CHEMISTRY

**103 General and Inorganic Chemistry** **4 hrs. credit**

Prerequisite: One year of high school algebra. For those who have not studied chemistry in high school. Those completing Chem. 103 are expected to elect 104 or 112 the following semester. Five hours of lecture and quiz and two two-hour laboratory periods weekly.

**104 General and Inorganic Chemistry** **4 hrs. credit**

Prerequisite: Chem. 103. A continuation of Chem. 103. Chem. 103 and 104 satisfy the science requirement in liberal arts. Not accepted as a prerequisite for advanced courses in chemistry. Four hours of lecture and quiz and two two-hour laboratory periods weekly.

**111 General and Inorganic Chemistry** **4 hrs. credit**

Prerequisite: High school chemistry. For students in chemical engineering, agriculture, nursing, pre-dentistry, pre-medicine, medical technology, pre-veterinary, pre-forestry, home economics, and related curricula of chemistry. Includes laws of chemical combination, states of matter, atomic and molecular structure, the physical and chemical properties of metals and non-metals. Four hours of lecture and quiz and two two-hour laboratory periods weekly.

**112 General and Inorganic Chemistry** **4 hrs. credit**

Prerequisites: Chem. 103 or 111. A continuation of Chem. 111. Metallurgy of common metals, their separation and properties. Carbon and similar compounds are studied. Students desiring advanced work in chemistry should elect Chem. 112 after completing Chem. 103. Four hours of lecture and quiz and two two-hour laboratory periods weekly.

**115 General Inorganic Chemistry for Engineers** **5 hrs. credit**

Prerequisites: High school chemistry or Chem. 103 and one and one-half units of high school algebra. The descriptive chemistry of some of the non-metallic elements and of the more important metallic elements, along with the important laws and principles. Four hours of lectures and quiz and two three-hour laboratory periods weekly.

**117 Inorganic Chemistry and Qualitative Analysis** **5 hrs. credit**

Prerequisite: Chem. 111 and consent of Chairman of Chemistry Department. A continuation of general chemistry with emphasis on semi-micro qualitative analysis for laboratory work. Four hours of lecture and quiz and two three-hour laboratory periods weekly.

**125 Chemistry of Engineering Materials** **3 hrs. credit**

Designed for engineers. A study of the manufacture and properties of ferrous and non-ferrous alloys, cements, clay products, protective coatings, fuels, and water softening. 3 hrs. weekly.

## CHEMISTRY, DRAWING

**221 Qualitative Analysis****4 hrs. credit**

Prerequisite: Chem. 112. An explanation of laboratory procedure in terms of the principles of general chemistry. Semi-micro laboratory procedure involves identification of common metals through appropriate unknowns; also the identification of common acid groups. Two hours of lecture and quiz and two four-hour laboratory periods weekly.

**222 Organic Chemistry****4 hrs. credit**

Prerequisites: Chem. 112 or 115. A first course in the basic principles of organic chemistry, dealing with the carbon compounds of both the aliphatic and aromatic series. Major emphasis upon the aliphatic series. Fills the requirements for medicine, dentistry, pharmacy, agriculture, home economics, and other related curricula. Four hours of lecture and quiz weekly.

**223 Organic Chemistry Laboratory****2 hrs. credit**

Prerequisites: Chem. 222. The preparation of a number of typical organic compounds and the determination of their physical constants. Two four-hour laboratory periods weekly.

**225 Quantitative Chemistry****4 hrs. credit**

Prerequisite: Chem. 117 or 221. Knowledge of common logarithms essential. Theory and practice of volumetric and gravimetric analysis. Major emphasis upon volumetric analysis. Three hours of lecture and quiz and two four-hour laboratory periods weekly.

**226 Quantative Chemistry****3 hrs. credit**

Prerequisite: Chem. 117 or 221. Similar to Chem. 225 but adapted to the needs of medical technology students. Not accepted for chemistry or pre-medicine majors. Three hours of lecture and quiz and two four-hour laboratory periods weekly.

**251 Organic Chemistry****2 hrs. credit**

Prerequisite: Chem. 222 or its equivalent. Emphasis upon the mechanics of organic reactions as applied to industry.

**252 Organic Chemistry****2 hrs. credit**

Prerequisite: Chem. 251. A continuation of Chem. 251

**DRAWING****101 Mechanical and Machine Drawing****3 hrs. credit**

The principles of orthographic projection, the making of working drawings, correct drafting-room practice in conventional representation, the use of instruments, freehand and mechanical lettering, reading and checking of drawings, instruction on blue and white printing, practice in tracing, original drawing on vellum. 6 hrs. weekly.

**102 Descriptive Geometry****3 hrs. credit**

Prerequisites: Draw. 101 and Math. 155 or its equivalent. Emphasis upon the ability to visualize problems and upon processes of solution. Includes problems comprising combinations of the point, lines and planes, intersections, developments, warped surfaces, and tangent planes. 6 hrs. weekly.

**120 Lettering****2 hrs. credit**

The history, styles, and methods of lettering; basic forms, media and tools, techniques, and designs; daily plates and a term plate. 4 hrs. weekly.

**130 Blue Print Reading****2 hrs. credit**

The fundamental principles of representing objects by blue prints, with detailed analysis of both industrial and architectural blueprints. Provides both understanding and skill sufficient to make such practical use of blueprints as may be demanded on the job. 4 hrs. weekly.

**140 Shop Sketching****2 hrs. credit**

Training in clear, readable, rapidly executed freehand sketches for machinists, fabricators, draftsmen, and engineers. Includes shop and field sketching in orthographic projection, oblique, isometric, and perspective. 4 hrs. weekly.

**151 Industrial Drawing****3 hrs. credit**

Meets the need for a practical introduction to engineering, drafting, and shop practice. Shop sketching, typical plant layouts, piping drawing, pattern drawing, machine design, and elementary sheet metal layouts. Emphasis upon developing clear shop drawings from shop sketches and notes. Practical application of pictorial representation and orthographic projection. 6 hrs. weekly.

**152 Descriptive Geometry****3 hrs. credit**

Prerequisite: Draw 151. Problems in visualization, point, line, true length, revolution, normal views, intersection, developments, warped surfaces, and tangent planes. 6 hrs. weekly

**201 Engineering Drawing****2 hrs. credit**

Prerequisite: Draw. 102. Sketching from models in orthographic, isometric, and oblique projection. Practice in making working drawings from sketches. Analysis of machines, tracing transmission of motion and power, and devising combinations to accomplish specific purposes. 4 hrs. weekly

**251 Industrial Drawing****3 hrs. credit**

Prerequisite: Draw 152. Deals with original and assigned problems, including original thinking and planning. Problems conceived, planned, drawn, and, if possible, constructed by the student, using available processes and materials. Cost estimates, bills of materials, specifications, and a typewritten report accompany each problem. Field trips during the semester. 6 hrs. weekly.

**252 Advanced Industrial Drawing****3 hrs. credit**

Prerequisite: Draw. 251. A continuation of Draw. 251. 6 hrs. weekly.



**ECONOMICS**

**111 Elementary Economics** **3 hrs. credit**  
 A course designed to acquaint the student with the study of practical economics.

**112 Elementary Economics** **3 hrs. credit**  
 Prerequisite: Econ. 111 or the consent of the instructor A continuation of Econ. 111 Deals with applied modern problems in economics.

**121 Labor Economics** **3 hrs. credit**  
 Prerequisite: Econ. 111 or the consent of the instructor A study of the human factor in industry. Problems of wages, hours, unemployment, working conditions.

**131 Corporate Finance** **3 hrs. credit**  
 Prerequisite: Econ. 111 or the consent of the instructor An introduction to the principles of financial policies of corporations. Deals with promotion of the corporate enterprise, types of corporate securities, sources of funds for expansion.

**201 Principles of Economics** **3 hrs. credit**  
 Open only to sophomores. A basic course in beginning economics. Studies relation of production and income; forms of business organization, money and banking system of the United States; value of money; employment; business cycles and economic instability.

**202 Principles of Economics** **3 hrs. credit**  
 Prerequisite: Econ. 201 A continuation of Econ. 201 The forces which determine prices under competition and under varying degrees of monopoly; function of prices and costs in allocating production factors; distribution of income; public finance; alternative economic systems.

**EDUCATION**

**101 Refresher in Teaching Methods** **3 hrs. credit**  
 Designed for those planning to return to teaching after some years' absence or wishing to qualify as substitutes in the Bay City School System. Special attention to recent developments in elementary education. Individual and small group study of special teaching problems.

**102 Education** **2 hrs. credit**  
 Prerequisite: Ed. 101 A continuation of Ed. 101

*Education 201, 203, 204, 207, 212 are open only to sophomores who have completed the requirements for entry into the second year of County Normal or State Limited Certificate programs.*

**201 Principles of Teaching** **3 hrs. credit**  
 Examination of the aims toward which teaching should be directed and of conditions essential to successful teaching and learning. Analysis of the various types of learning activities. Observation and critical evaluation of teaching procedures.

## EDUCATION, ELECTRONICS, ENGLISH

### 203 Method of Teaching

**3 hrs. credit**

Methods in teaching as applied to rural schools. A brief consideration of the principles involved in teaching and learning; application of these principles in selection of subject matter and activities; emphasis upon teaching reading, writing, spelling, and language. Observation of the work of the kindergarten and first six grades in the training school.

### 204 Method of Teaching

**3 hrs. credit**

Similar to Ed. 203 with emphasis placed upon the teaching of literature, arithmetic, elementary science, and social studies, including geography and history.

### 207 Rural School Management

**3 hrs. credit**

Prerequisites: Ed. 201, 203, and 204. Preparation to teach in the rural schools. Principles basic to the effective organization and management of classes; classroom routine, tests and measurements, records and reports, case studies of behavior problems, individual differences and class adjustments, professional ethics, and relations with parents and community

### 212 Supervised Teaching

**5 hrs. credit**

Prerequisites: Ed. 201, 203, and 204. A laboratory course requiring two hours a day, five days a week, for ten weeks of class meetings, conferences, and assigned readings. Eight weeks of half-day teaching under supervision in the Bay City Schools, followed by two weeks of fulltime teaching under supervision in nearby county schools.

## ELECTRONICS

### 151 Electronics

**3 hrs. credit**

Fundamentals of radio receiver servicing. Also covers material necessary to prepare for F.C.C. second class radio telephone license. Covers electronic theory, elements of radio broadcasting, and receiver and circuit analyses.

### 152 Intermediate Electronics

**3 hrs. credit**

A continuation of Elec. 151, including advanced radio theory, modulation, class A and B amplifiers, F.M., and F.M. communication equipment

## ENGLISH

### 5 Freshman English

**3 hrs. credit**

Designed to help students increase their ability to express themselves clearly and convincingly and to read with understanding.

### 6 Freshman English

**3hrs. credit**

Prerequisite: Eng. 5. A continuation of Eng. 5.

### 12 Reading Improvement

**1 hr. credit**

Intended for all students who wish to improve their reading speed and comprehension. Presented on an individual basis.

**14 School Publications****1 hr. credit****ENGLISH**

Gives students interested in publications an opportunity for group discussion of problems relating to the College paper and yearbook. Each student automatically becomes a staff member of the Bay City Junior College publications.

**15 School Publications****1 hr. credit**

A continuation of Eng. 14.

**101 Composition and Reading — Freshman Course****3 hrs. credit**

Designed to develop competence in reading and writing. Emphasizes study of essays, writing of themes, both prepared and impromptu, and usage.

**102 Composition and Reading — Freshman Course****3 hrs. credit**

Prerequisite: Eng. 101 Continued practice in reading and writing, the readings consisting of fiction and more difficult essays. Themes, both prepared and impromptu. Research paper required.

**116 Business Communication****3 hrs. credit**

Designed to develop skill in the writing of business letters. Practice in the writing of letters of inquiry, orders, acknowledgments, and application. A review of English fundamentals is included. If a course in typing has not already been taken, one must be taken concurrently.

**117 Business Communication****3 hrs. credit**

Prerequisite: Eng. 116. Continued practice in writing business letters, with emphasis upon sales letters, replies to prospects, collections, claims, and adjustments; the writing of advertising copy; collection of information for reports. All assignments must be typewritten.

**201 Advanced Composition****3 hrs. credit**

Prerequisite: Eng. 102. Designed to promote increased skill in writing, the course offers practice in the reading and writing of various forms of literature. Provides individual, as well as class, instruction.

**223 Introduction to Literature****3 hrs. credit**

Designed to increase the student's ability to read literature with understanding and enjoyment. About half the semester is devoted to the reading and discussion of several novels and half to poetry of various periods and types.

**224 Introduction to Drama****3 hrs. credit**

Concerned with the understanding and appreciation of the drama. Half the semester is given to the close reading of five or six of Shakespeare's plays and half to selected plays of the nineteenth and twentieth centuries.

**231 English Literature from the Beginning to 1800****3 hrs. credit**

Chief literary achievements of the period are read with the purpose of developing understanding and appreciation.

## ENGLISH, FRENCH

**232 English Literature from 1800 to the Present****3 hrs. credit**

A continuation of Eng. 231. Concerned with the chief literary works of the period from the Romantic Revival to the present.

**241 American Literature****3 hrs. credit**

Acquaints the student with the literary heritage of America from Irving to the present day.

**FOREIGN LANGUAGE**

Many four-year colleges and universities have a foreign language requirement for graduation. Students should check carefully to see that they meet the language requirements of the colleges to which they may be transferring.

**FRENCH****111 Elementary French****4 hrs. credit**

Basic grammatical construction, fundamentals of pronunciation with laboratory assignments, daily oral-aural practice, composition, reading, acquisition of French vocabulary.

**112 Elementary French****4 hrs. credit**

Prerequisite: Fr 111 or one year of high school French. Oral-aural practice continued with laboratory assignments, grammar principles, accompanied by exercises and written composition, and reading. Outside reading for comprehension of easy French reading material without translation.

**211 Intermediate French****4 hrs. credit**

Prerequisite: Fr 112 or two years of high school French. Review and application of essential principles of French grammar by means of oral and written exercises and composition, pronunciation through oral and aural exercises and conversation, reading of French prose, outside reading to develop the ability to read rapidly at sight. As far as possible conducted in French.

**212 Intermediate French****4 hrs. credit**

Prerequisite: Fr 211 or three years of high school French. A continuation of Fr 211, with somewhat more emphasis upon oral skill and conversation.

**221 French Conversation****2 hrs. credit**

Prerequisite: Fr 212 or equivalent. Improvement of pronunciation through a study of the basic elements of phonetics, with exercises to improve accuracy of sounds and intonation; the acquisition of an active vocabulary through exercises in simple conversation based upon everyday life. 3 hrs. weekly.

**222 French Conversation****2 hrs. credit**

Prerequisite: Fr 221. A continuation of Fr 221 with emphasis upon greater fluency. 3 hrs. weekly.



## GERMAN, HEBREW, SPANISH

## GERMAN

**111 Elementary German****4 hrs. credit**

Designed to develop the ability to read standard German. Emphasis upon the oral-aural aspects of the language by means of oral reading, aural comprehension, recordings, and the use of phrases and idioms frequent in conversation.

**112 Elementary German****4 hrs. credit**

Prerequisite: Ger 111 or one year of high school German. A continuation of Ger 111

## HEBREW

**151 Biblical Hebrew****2 hrs. credit**

The grammar of Old Testament Hebrew with attention to elementary forms of vocabulary. Furnishes a working knowledge of the language for an understanding of the original writings of the Old Testament.

## SPANISH

**103 Conversational Spanish for Beginners****4 hrs. credit**

Oral work, easy reading, pronunciation.

**104 Conversational Spanish for Beginners****4 hrs. credit**

A continuation of Sp. 103.

**111 Elementary Spanish****4 hrs. credit**

An understanding of grammatical constructions, accompanied by exercises and easy composition. Emphasis upon pronunciation. Daily oral-aural practice with language laboratory assignments.

**112 Elementary Spanish****4 hrs. credit**

Prerequisite: Sp. 111 or one year of high school Spanish. A continuation of Sp. 111

**211 Intermediate Spanish****4 hrs. credit**

Prerequisite: Sp. 112 or two years of high school Spanish. Reading of modern texts. Review and application of the essential principles of grammar by means of oral and written exercises. Composition weekly. Conversation. Outside reading to develop ability to read rapidly at sight.

**212 Intermediate Spanish****4 hrs. credit**

Prerequisite: Sp. 211 or three years of high school Spanish. A continuation of Sp. 211

**221 Spanish Conversation****3 hrs. credit**

Prerequisite: Sp. 212 or equivalent. Improvement of pronunciation. Acquisition of an active vocabulary through conversation based upon everyday life.

**222 Spanish Conversation****3 hrs. credit**

Prerequisite: Sp. 221 A continuation of Sp. 221

**GEOGRAPHY****101 Introductory Geography****4 hrs. credit**

The geographic concepts concerning landforms, climate, soils, and other planetary phenomena. The major part of the course is devoted to the study of climatic elements.

**102 World Regional Geography****4 hrs. credit**

The major geographical regions of the world studied from the viewpoint of their economic development, relationships with other regions, and the various modes of human "occupance" within the region itself

**103 Economic Geography****4 hrs. credit**

A survey of the geographic reasons for the regional specialization in commodities and for the localization of industries. A study of the regional competition for markets, of transportation, and of port conditions. Recommended for students in business, commerce, and secretarial work, and for those planning to teach commercial subjects.

**106 Anglo-American Geography****4 hrs. credit**

A study of the geographic regions of the United States and Canada from the viewpoint of populations, resources, and economic developments, especially manufacturing. Emphasis placed upon factors promoting regional unity and the role of Anglo-America in world affairs.

**GEOLOGY****101 Physical Geology****4 hrs. credit**

The earth's features, treated with special reference to their origin and significance; agencies effecting changes in geographic features; physiographic changes in progress; the effect of man's physical environment upon his distribution, habits, and occupations. Includes an introductory study of common rocks and rock-forming minerals and the interpretation of topographic maps. Three classroom periods and one two-hour laboratory period weekly, with occasional field trips.

**102 Historical Geology****4 hrs. credit**

Prerequisite: Geol. 101 The fundamental problems involved in dynamical, structural, and historical geology. The history of the earth studied from its origin to the present. The successive stages are followed in the development of North America as a typical continent: the formation of mountains, plains, and the evolution of the life of land and seas. Includes identification of fossils and interpretation of geologic maps. Three classroom periods and one two-hour laboratory period weekly, supplemented by field work.

**153 Modern Prospecting****2 hrs. credit**

A study of the modern instruments used in prospecting: Geiger counters, scintillation counters, ultra-violet light, metal detectors, and others. Also discussed: choice of counters, locations of radio-active minerals, examination of the major radioactive minerals. Field methods, United States Land Survey System, staking claims, and federal regulations.

**HISTORY****101 A Survey of Early Western Civilization****4 hrs. credit**

The political, social, economic, and cultural history of Europe from pre-historic times to the beginning of the sixteenth century. Particular attention given to causes of the rise and fall of civilizations and their contributions to the modern world.

**102 A Survey of Later Western Civilization****4 hrs. credit**

The political, social, economic, and cultural history of Europe from the Reformation to the end of the nineteenth century. Particular attention given to the colonial, national, and democratic movements and their influence upon current events.

**105 History of Michigan****2 hrs. credit**

A survey of the history of Michigan from the time of the first known human inhabitants through French and British domination, and finally the American acquisition of Michigan as a territory and a state. Emphasis upon Michigan history as a representative part of human culture.

**151 The Bible as History****2 hrs. credit**

A history of Judaism between 200 B.C. and 70 A.D. and a survey of the Jewish religious literature of that period. Furnishes a foundation for appreciation of the Bible through an understanding of the life which produced and is reflected in it.

**201 History of the United States to 1865****3 hrs. credit**

The history of the United States from its immediate European backgrounds to the end of the Civil War. Some emphasis upon social history and American international relations.

**202 History of the United States from 1865 to the Present****3 hrs. credit**

A continuation of Hist. 201. American History from the end of the Civil War to the present time. Some emphasis upon social history and American international relations.

**203 History of the United States from 1900 to the Present****2 hrs. credit**

Not open to students who have credit in Hist. 202. A study of the political, economic, and social development of twentieth century America.

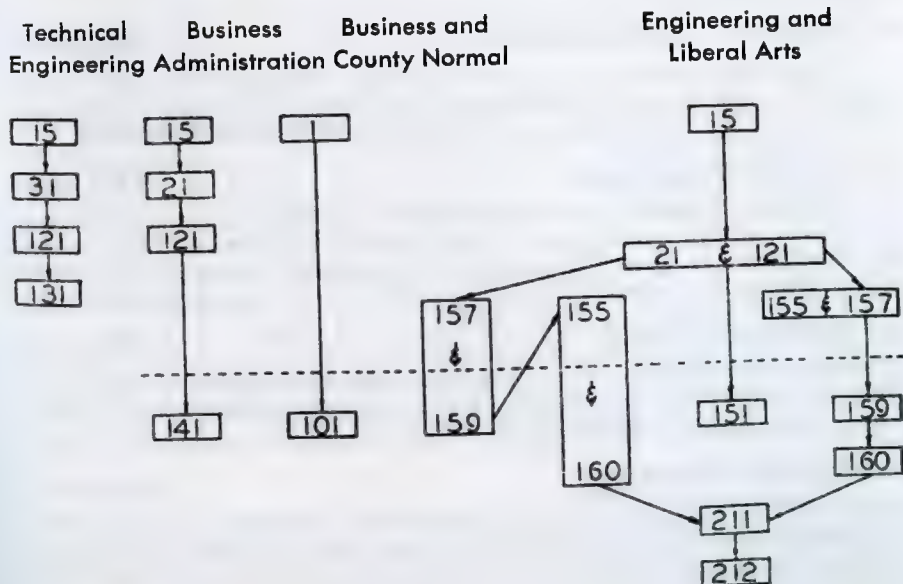
**211 The Pacific-Indian Ocean Basin****4 hrs. credit**

Prerequisites: Hist. 102, 202, or 203. A study of the countries touching the Pacific and Indian Oceans, their relations to each other and to the United States. Presents the geography of the area as a whole, followed by more detailed study of the recent history and the economic, social, and political situations of Asia, the Near East, South America, and the United States. Develops the relations of these areas with each other.

# MATHEMATICS

## SEQUENCES OF MATHEMATICS COURSES

The following charts indicate the sequences which are to be followed by mathematics students. The starting point in any sequence is determined by the student's high school record and the results of his college mathematics placement examination. When two course numbers are included in the same rectangle, they may be taken concurrently. Courses above the dotted line may have been completed before the student enters college.





## MATHEMATICS

Many colleges and universities admit students who have had little preparation in high school mathematics. Elementary algebra and plane geometry are, however, essential for certain college courses. They are prerequisites in many degree curricula. Although deficiencies in mathematics may be removed at Junior College, time spent in so doing may require the student to attend college one or more extra semesters.

Placement of students in mathematics courses depends not only upon the prerequisites for these courses but also upon satisfactory performance on a mathematics placement test.

**1 Fundamentals of Arithmetic****1 hr. credit**

Credit canceled if followed by Math. 15. Designed to meet the needs of students deficient in mathematics as shown by a mathematics placement test. For fundamental operations on whole numbers, common and decimal fractions, percentage, square root, evaluation of formulas, use of tables, applied problems.

**15 Fundamentals of Arithmetic and Algebra****5 hrs. credit**

Fundamentals of arithmetic. Algebra: four fundamental operations on monomials, polynomials and fractions; linear equations; quadratic equations; systems of equations; mental multiplication and factoring; exponents and radicals.

**21 Plane Geometry****5 hrs. credit**

Prerequisite: Math. 15 or its equivalent. Angles, parallel lines, Pythagorean theorem, polygons, loci, circles, proportional line segments, similar polygons, areas.

**31 Computation and Mensuration****4 hrs. credit**

Prerequisite: Math. 15 or its equivalent. Designed for the second semester in the Technical Engineering curriculum. Logarithms; slide rule; lines and areas of plane figures; lines, areas, and volumes of solids.

**101 Business Computation****3 hrs. credit**

Prerequisite: Math. 1 or its equivalent. Combinations, special cases and short methods used in combinations; rapid calculation; various methods of proof in checking results; complex fractions and mixed numbers; decimals; percentage; interest; discount; logarithms; and elements of statistics.

**121 Intermediate Algebra****3 hrs. credit**

Prerequisites: Math. 15 and 21 or their equivalents. Fundamental processes, factoring, fractions, linear equations, quadratic equations, graphs, exponents, radicals, variations, proportion, logarithms.

**131 Practical Trigonometry****3 hrs. credit**

Prerequisite: Math. 121 or its equivalent. Designed for the fourth semester in the Technical Engineering curriculum. Solution of right and oblique triangles, using natural functions, log functions, and slide rule. Applications to machine shop and an introduction to surveying.

**141 College Algebra**

**3 hrs. credit**

Prerequisites: Math. 21 and 121 or their equivalents, or may be accompanied by Math. 121 Not intended for students who wish to take Analytic Geometry. Exponents and radicals, logarithms, quadratic equations, binominal formulas, progressions, compound amounts and annuities, permutations and combinations, determinants, statistics.

**151 Slide Rule**

**1 hr. credit**

Prerequisites: Math. 21 and 121 or their equivalents, with a knowledge of logarithms. For engineering students or those majoring in physics or chemistry. Students should consult their advisers before purchasing slide rule.

**155 Solid Euclidean Geometry**

**2 hrs. credit**

Prerequisites: Math. 21 and 121 Formulas, basic constructions and propositions, original exercises, mensuration.

**157 Trigonometry**

**3 hrs. credit**

Prerequisites: Math. 21 and 121 or their equivalents. Radian measure, co-ordinate systems, trigonometric ratios, identities, equations, inverse functions, graphs, logarithms, reduction and addition formulas, solutions of right and oblique triangles, including areas.

**159 College Algebra**

**3 hrs. credit**

Prerequisites: Math. 21, 121, and 157, or may be accompanied by Math. 157 For students who plan to take Analytic Geometry. Review of exponents, radicals, quadratic equations; variation; proportions systems of equations; complex numbers; theory of equations; Horner's method; determinants; inequalities.

**160 Plane and Solid Analytic Geometry**

**4 hrs. credit**

Prerequisites: Math. 155, 157, and 159. Cartesian co-ordinates, loci, symmetry, lines, conic sections, algebraic curves, transcendental curves, polar co-ordinates, space co-ordinates, plane, straight line, quadric surfaces, space curves.

**211 Calculus**

**5 hrs. credit**

Prerequisites: Math. 160. Functions and limits; continuity; derivative; differentiation of algebraic, transcendental, and hyperbolic functions; maxima and minima; related rates; curve tracing; rectilinear and curvilinear motion; indefinite and definite integrals; areas; volumes; length of arc; work; liquid pressure, centroids; moments of inertia.

**212 Calculus**

**4 hrs. credit**

Prerequisite: Math. 211 Further methods of integration, Improper Integrals, indeterminate forms, Taylor's and Maclaurin's series, infinite series, partial derivatives, multiple integrals, introduction to differential equations.

## MUSIC

### 101 Music Appreciation

**3 hrs. credit**

Acquaints the student with the fundamentals of listening and with the musical classics.

### \*103 Band

**2 hrs. credit**

The techniques of various band instruments and a study of band literature.

Opportunity offered for instruction and practice in conducting.

### \*105 Orchestra

**2 hrs. credit**

The technique of orchestral instruments, the study of orchestral literature, and experience in accompanying. Opportunity offered for practice and instruction in conducting.

\*Music 103 and 105 ordinarily are offered through enrollment in high school classes.

### 111 Elements of Music

**2 hrs. credit**

Planned to meet the needs of those in elementary education. Deals with the rudiments of music, including notation, clefs, keys, syllables, and the teaching of rote songs.

### 141 A-B-C-D A Cappella Choir

**1 hr. credit each semester**

Membership open to all Junior College students. Directed toward the study of representative choral music and public performances in college and community activities. May be taken for four semesters. 2 hrs. weekly.

### 151 - 152 - 251 - 252 Theory — Basic Musicianship. 3 hrs. credit each semester

Basis course for all students who plan to specialize in music. Develops basic musicianship, with special emphasis on aural history. An analysis of the style of Bach as found in the chorale harmonizations and a survey of the styles of Haydn, Mozart, and Beethoven. These are integrated courses and include in their content

a. Correlation of aural, visual, and factual approaches.

b. Tones and rhythms in perpendicular and horizontal relationships.

c. Expression of musical ideas in elementary formal structure.

Specific procedures: lectures on acoustics, study of triads, intervals, sight-singing, and rhythmic reading. Emphasis on harmonic and melodic dictation.

## NURSING

All nursing courses are open only to Practical Nurses.

### 51 Nursing Skills Practice

**5 hrs. credit**

A study of basic principles of nursing care. Four hours of lecture, six hours of laboratory work weekly.

### 52 Diversional Activities

**1 hr. credit**

A course designed to instruct students in methods of assisting patients through activities.

### 53 Vocational Relationships

**1 hr. credit**

A study of attitudes and reactions as related to the nursing profession.

### 55 First Aid

**1 hr. credit**

The Standard Red Cross course in First Aid instruction.

## NURSING, NUTRITION, PHILOSOPHY

**56 Medical and Surgical Nursing****3 hrs. credit**

A survey of nursing procedures in the medical and surgical fields. Given at the hospital. Three hours weekly, sixteen weeks.

**58 Obstetric and Pediatric Nursing****3 hrs. credit**

A survey of nursing procedures in the obstetric and pediatric fields. Given at the hospital. Three hours weekly, sixteen weeks.

**60 Nursing Laboratory****14 hrs. credit**

A co-operative experience in nursing given at the hospital. Thirty-six hours weekly for thirty-two weeks. During this supervised period the student earns a daily stipend.

**NUTRITION****51 Family Nutrition and Homemaking****3 hrs. credit**

Open only to practical nursing students. A study of normal nutrition and of diet therapy.

**PHILOSOPHY**

Philosophy is the science which investigates the general facts and principles of reality and of human nature and conduct; specifically the science which comprises logic, ethics, aesthetics, metaphysics, and the history of knowledge.

**100 Introduction of Philosophy****3 hrs. credit**

Reading and lectures in major branches of philosophy. Particular reference given to the classical philosophers, including Socrates, Plato, Aristotle, and others.

**\*210 History of Philosophy****3 hrs. credit**

Readings from selected philosophers which trace the evolution of philosophical thought from the Greeks through the 18th century

**\*220 Contemporary Philosophy****3 hrs. credit**

Designed to stimulate interest in the modern schools of ideas.

**\*230 Logic****4 hrs. credit**

Aims to develop effective thinking through a study of classical logic. For all students who desire an understanding of the basic concepts of thinking.

\*To register, a student must possess either a grade average of C (2.0) or better or secure the consent of the Philosophy Chairman. No other prerequisite.



## PHYSICAL EDUCATION

Each first-year student is required to take two hours of physical education weekly. These two hours, for which one hour of credit is granted each semester, may consist of any combination of activities. Two credits of physical education are required to graduate from Junior College.

If a student has a physical disability which prevents his taking physical education, he must present a medical excuse to the Chairman of the Department.

Students wishing to transfer to other colleges upon graduation from Junior College should be sure that they have taken the physical education necessary to satisfy the requirements of the colleges to which they are transferring.

Veterans who have served ninety days in the Armed Forces are excused from the graduation requirement of physical education. Their attention is called to the fact that certain colleges to which they may transfer require earned credits in physical education.

### PHYSICAL EDUCATION — MEN

#### **101 General Physical Education** **1 hr. credit**

A variety of activities such as group games, tumbling and apparatus, touch football, basketball, volleyball, wrestling, and speed soccer

#### **102 General Physical Education** **1 hr. credit**

Prerequisite Phys. Ed. 101 A continuation of Phys. Ed. 101 with softball added.

#### **103 Swimming** **1 hr. credit**

A combination of beginning and advanced swimming. Basic strokes are taught. Opportunity to learn many other aquatic skills, including fundamentals of water polo.

#### **104 Swimming** **1 hr. credit**

A continuation of Phys. Ed. 103.

#### **105 Touch Football, Soccer, Basketball, and Volleyball** **1 hr. credit**

Sports offered according to weather Skills and rules involved in each game.

#### **106 Basketball, Volleyball, and Track and Field** **1 hr. credit**

Sports offered according to weather

#### **107 Weight Lifting and Wrestling** **1 hr. credit**

Designed to enable the student to initiate a body-building program. Fundamentals of weight lifting and Collegiate wrestling. The student engages in dual matches.

#### **108 Weight Lifting and Wrestling** **1 hr. credit**

A continuation of Phys. Ed. 107

#### **109 Handball, Badminton, and Tennis** **1 hr. credit**

Sports offered according to weather

#### **110 Handball, Badminton, and Tennis** **1 hr. credit**

A continuation of Phys. Ed. 109 Sports offered according to weather

## PHYSICAL EDUCATION

- 111 Handball, Badminton, and Golf** 1 hr. credit  
Sports offered according to weather
- 112 Handball, Badminton, and Golf** 1 hr. credit  
A continuation of Phys. Ed. 111 Sports offered according to weather
- 201 Advanced General Physical Education** 1 hr. credit  
Prerequisites Any two of the following — Phys. Ed. 101, 102, 105, 106, 107, 108, 109, 110, 111 Designed for those wishing a variety of activities such as group games, tumbling and apparatus, touch football, basketball, volley ball, wrestling, and speed soccer Softball added in the spring.
- 202 Advanced General Physical Education** 1 hr. credit  
A continuation of Phys. Ed. 201
- 203 Advanced Swimming** 1 hr. credit  
Prerequisites: Phys. Ed. 103 and 104.
- 204 Advanced Swimming** 1 hr. credit  
Prerequisites: Phys. Ed. 203. A continuation of Phys. Ed. 203.
- 205 Basketball, Volleyball, Touch Football, and Soccer** 1 hr. credit  
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 107, 108, 109, 110, 111, 112. Sports offered according to weather
- 206 Basketball, Volleyball, Track, and Field** 1 hr. credit  
Prerequisites: Phys. Ed. 205. Sports according to weather
- 207 Weight Lifting and Wrestling** 1 hr. credit  
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 107, 108, 109, 110, 111, 112. Designed to enable the student to initiate a body-building program. The fundamentals of weight lifting and of Collegiate wrestling taught. The student engages in dual matches.
- 208 Weight Lifting and Wrestling** 1 hr. credit  
A continuation of Phys. Ed. 207
- 209 Handball, Badminton, and Tennis** 1 hr. credit  
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 107 108, 109 110, 111, 112. Sports according to weather. Double elimination tournament for each sport
- 210 Handball, Badminton, and Tennis** 1 hr. credit  
A continuation of Phys. Ed. 209
- 211 Handball, Badminton, and Golf** 1 hr. credit  
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 107 108, 109, 110, 111, 112.
- 212 Handball, Badminton, and Golf** 1 hr. credit  
A continuation of Phys. Ed. 210, with golf substituted for tennis.

## PHYSICAL EDUCATION, PHYSICS

## PHYSICAL EDUCATION — WOMEN

**101 General Physical Education** 1 hr. credit

A variety of activities such as basketball, volleyball, table tennis, and other group games. Special emphasis upon carry-over sports such as golf, tennis, and badminton.

**102 General Physical Education** 1 hr. credit

A continuation of Phys. Ed. 101 Softball added in the spring.

**103 Swimming** 1 hr. credit

A program set up for beginning, intermediate, and advanced swimmers.

**104 Swimming** 1 hr. credit

A continuation of Phys. Ed. 103.

**201 Advanced General Physical Education** 1 hr. credit

Prerequisites: Phys. Ed. 101 and 102. A continuation of Phys. Ed. 101 and 102. Should be elected by women who are physical education majors or who are transferring to institutions requiring more than two semesters of physical education.

**202 Advanced General Physical Education** 1 hr. credit

Prerequisite: Phys. Ed. 201

**203 Advanced Swimming** 1 hr. credit

Prerequisites: Phys. Ed. 103 and 104. Designed for those specializing in physical education or working for summer life-saving positions.

**204 Advanced Swimming** 1 hr. credit

Prerequisite: Phys. Ed. 203. Designed for those students electing four semesters of swimming.

## PHYSICS

**1 Elementary Physics** 4 hrs. credit

Prerequisites: Math. 15 and 21 or equivalents in high school mathematics. By special permission, one of these may be taken with Physics 1 A general course in elementary physics for students entering without high school physics. 4 hrs. weekly.

**101 General Physics** 4 hrs. credit

Prerequisites: Physics 1 or high school physics; Math. 21 and 121 or their equivalents in high school mathematics. Trigonometry is desirable. By special permission the requirement of high school physics may be waived for students having trigonometry and a scholastic average of B (3.0) or better Deals with mechanics, heat, and sound. Four hours of lecture and quiz and three hours of laboratory weekly.

**102 General Physics** 4 hrs. credit

Prerequisite: Physics 101 A continuation of Physics 101 Covers magnetism, electricity, and light. Four hours of lecture and quiz and three hours of laboratory weekly.

## PHYSICS, PHYSIOLOGY, POLITICAL SCIENCE

**201 General Physics****5 hrs. credit**

Prerequisite: High school physics or its equivalent, Math. 157 and 160. By special permission, the latter may be taken as a parallel course. Covers the same general topics as Physics 101 but adapted to meet the needs of engineering students. Many quantitative relationships are more fully developed and applied to the solution of additional problems. Five hours of lecture and quiz and three hours of laboratory weekly.

**202 General Physics****5 hrs. credit**

Prerequisite: Physics 201 A continuation of Physics 201 Covers magnetism, electricity, and light with same distribution of hours.

**205 Engineering Mechanics, Statics****3 hrs. credit**

Prerequisites: Physics 201 and Math. 211 Math. 212 may be taken as a parallel course. Covers forces, components, vectors, moments, couples, methods of sections, stress in frame structures analytically and graphically, cables, friction, centroids, shear and bending moments.

**PHYSIOLOGY AND HYGIENE****51 The Body in Health****2 hrs. credit**

For practical nursing students only. A study of the body in health.

**53 The Body in Disease****2 hrs. credit**

For practical nursing students only A study of the body in disease.

**101 Physiology and Hygiene****4 hrs. credit**

An introduction to personal and community health, knowledge of which will enable the student more adequately to meet health responsibilities in the home, the place of employment, the school, and the community.

**103 Physiology****4 hrs. credit**

An introduction to the mechanism of the human body and its normal functioning. Adapted to meet the needs of the medical secretary, medical technologist, dental hygienist, nurse, and pre-mortuary student. Not to be taken by pre-dental, pre-medical, or pre-pharmacy students.

**POLITICAL SCIENCE****101 American Government****4 hrs. credit**

The organization and functioning of the political, electoral, legislative, administrative, and judicial processes of the Federal Government.

**102 American Government****4 hrs. credit**

A continuation of Polit. Sci. 101 The development, organization, and problems of state and local government, with their relation to the federal administrative agencies.



## POLITICAL SCIENCE, PSYCHOLOGY, RELIGION

**103 American Government****3 hrs. credit**

Not open to students who have credit in Polit. Sci. 101 or 102. The organization and functioning of the political, electoral, legislative, administrative, and judicial processes of both federal and state governments.

**201 Comparative Government****3 hrs. credit**

Prerequisite: A college course in political science or history. Deals principally with the governments of Great Britain, France, Soviet Russia, and Spain, with some reference to the governments of Sweden and the South American countries. Special emphasis upon the theories of democracy, fascism, communism, and socialism.

**203 International Politics****3 hrs. credit**

Prerequisites: A college course in political science or history. An introduction to the study of politics among nations, designed to provide a working knowledge of the concepts necessary to an understanding of current world affairs such as the state system, colonialism, imperialism, and regional arrangements. Includes a survey of international organizations.

## PSYCHOLOGY

**201 General Psychology****4 hrs. credit**

Open to sophomores and second-semester freshmen with a B (3.0) average or better. Introduction to general psychology. A study of the principles underlying experience and behavior, designed to give an understanding of human behavior as affected by learning, motivation, emotion, intelligence, perception, personality, and inter-personal relationship.

**202 Child Psychology****3 hrs. credit**

Prerequisite: Psychology 201. A presentation of facts and generalizations concerning the growth of children from birth to school age. The child considered as a whole. Deals with physical, mental, social, and emotional development.

**203 Psychology of Personality****3 hrs. credit**

Prerequisite: Psych. 201. A study of the concepts of personality: the uniqueness of personality, factors in the development of personality, the methods of measuring personality, and some origins and the nature of mental and emotional maladjustments. 4 hrs. weekly.

## RELIGION

**151 Comparative Religions****2 hrs. credit**

A historical and critical study of the living religions of the world. The essential nature of each religion is studied. Original source materials are used. Surveys primitive religions of the Near and the Far East. Attention is directed to the lives and thinking of the people whom these religions influence.

## SHOP

### 1 Auto Mechanics

**7 hrs. credit**

A course in automotive repair and maintenance covering the theory of internal combustion engines, ignition and lighting, transmission systems, rear axles, and body construction. Work experience in the shop on mechanical repairs and the use of testing equipment are important parts of the course. Three hours of shop work required daily.

### 2 Auto Mechanics

**7 hrs. credit**

A continuation of Shop 1

### 5 Welding

**2 hrs. credit**

Consideration is given to modern welding practice, including ferrous and non-ferrous metals and alloys; electric and oxy-acetylene welding and cutting. One hour of shop work required daily.

### 6 Welding

**2 hrs. credit**

A continuation of Shop 5.

### 8 Machine Shop

**7 hrs. credit**

A study is made of the shaping of metals by cutting. The laboratory work includes practice with bench tools, lathes, planers, shapers, milling machines, and drill presses. Develops skill in the fundamentals of machine work. A study also is made of the more important semi-automatic and automatic machine tools used in modern manufacturing plants. Three hours of shop work required daily.

### 9 Machine Shop

**7 hrs. credit**

A continuation of Shop 8.

### 13, 14 Shop Technology

**2 hrs. credit each semester**

Consists of technical information for the purpose of upgrading individuals who are employed as machine operators. Covers arithmetic, algebra, fundamentals of mechanical drafting, blue print reading, and machine sketching.

### 15, 16 Shop Technology

**2 hrs. credit each semester**

Prerequisites: Shop 13 and 14. Offers advanced problems for the upgrading of the employed machine operator. Stresses geometry, trigonometry, applied physics, and metallurgy.

### 17, 18 Machine Shop Practice

**2 hrs. credit each semester**

A practical course in the operation of the lathe, shaper, milling machine, drill press, grinder, planer, and bench tools. Designed to broaden the experiences of the machine operator already employed in the trade. Applicants must register with the Vocational Department of the Bay City Public Schools.

### 21, 22; 23, 24; 25, 26 Auto Mechanics

**3 hrs. credit each semester**

Applicant must be indentured as an apprentice auto mechanic and must register with the Vocational Department of the Bay City Public Schools. Designed to cover related information required by apprenticeship standards of the automobile mechanic. Employer-employee relations and safety are stressed in addition to general automobile theory, shop mathematics, automotive electricity, carburetion, lubrication, and inspection.

**31, 32; 33, 34; 35, 36 Bricklaying** 3 hrs. credit each semester  
A three-year sequence.

**41, 42; 43, 44; 45, 46 Carpentry** 3 hrs. credit each semester  
A four-year sequence.

**51, 52; 53, 54; 55, 56 Electricity** 3 hrs. credit each semester  
A four-year sequence.

**61, 62; 63, 64; 65, 66 Iron Working** 3 hrs. credit each semester  
A three-year sequence.

**71, 72; 73, 74; 75, 76 Plumbing** 3 hrs. credit each semester  
A five-year sequence.

**81, 82; 83, 84; 85, 86 Sheet Metal Working** 3 hrs. credit each semester  
A four-year sequence.

The courses above offer related instruction required in their respective trades as outlined in the apprenticeship standards for each trade. Admission is subject to selection and trade placement by a Joint Apprenticeship Committee of each trade, which governs the policies of its training program. Open only through the Joint Apprenticeship Committee. Applicants must register with the Vocational Department of the Bay City Public Schools.

**91, 92, 93, 94; 95, 96 Machinist Apprenticeship** 3 hrs. credit each semester

A three or four-year sequence offered to apprentices in the trade of machinist. Covers related instruction required by the apprenticeship standards of the trade. Applicant must be working in the trade and must register with the Vocational Department of the Bay City Public Schools.

**101, 102; 103, 104; 105, 106 Tool and Die** 3 hrs. credit each semester

A four-year sequence offered to apprentices in the trade of tool and diemaking. Covers related instruction required by apprenticeship standards of the trade. Applicant must be working in the trade of tool and die making and must register with the Vocational Department of the Bay City Public Schools.

**111 Shop Practice** 2 hrs. credit

Designed for students interested in the study of machines, hand tools, and machine tools pertaining to machine shop. Also for those who wish to become proficient in manipulating the various machines such as the lathe, milling machines, shaper, planer, tool cutter, grinder, and drill press. The scope and the trend of modern shop practice and machines are used as a basis for class discussion. One recitation and one three-hour laboratory period weekly.

## SOCIOLOGY, SPEECH

## SOCIOLOGY

**51 Family Relationships** **2 hrs. credit**

For practical nursing students. A study of family relationships, vocational relationships, and diversional activities.

**201 Principles of Sociology** **3 hrs. credit**

An introduction to the scientific study of human relationships and institutions. Includes an evaluation of current literature as a reflection of man's culture. Basic for all courses in social work.

**202 Social Problems** **3 hrs. credit**

Prerequisites: Sociol. 201 or Psych. 201 The scientific approach to the causes and solutions of such social problems as the changing role of the family, the new concept of security, population changes, physical and mental health, juvenile delinquency, crime, and race problems.

## SPEECH

**101 Fundamentals of Speech for Engineering Students** **1 hr. credit**

For students in engineering only. Training in public speaking. Frequent speaking assignments and rigorous outlining procedure. Impromptu, extemporaneous, manuscript, and report speeches.

**102 Engineering and Scientific Speech** **2 hrs. credit**

Prerequisite: Speech 101 For students in engineering and scientific fields only. Semi-technical, expository speeches, illustrated with blue prints, charts, graphs, scientific apparatus, machine tools, and parts of the machine itself Outlining.

**125 Principles of Public Speaking** **3 hrs. credit**

A beginning course in the practical problems of speaking before an audience. Speaking assignments include the impromptu, extemporaneous, and manuscript methods of delivery. Emphasis on extemporaneous speaking and rigorous outlining and organizational procedure.

**221 Speechmaking** **3 hrs. credit**

A survey of all forms of collegiate speech. Includes the theory of speech; frequent platform experience. Attention given to radio and television speaking procedure. All speaking assignments outlined and personal and social communication stressed.

**222 Interpretative Speech** **3 hrs. credit**

A previous speech course is recommended. Phonetics and voice culture studied to enable students to interpret good literature and to project personality over stage and radio. Introduction to the elements of voice and diction. A survey of semantics examines language.

**223 Discussion in Human Affairs** **2 hrs. credit**

Prerequisite: A previous speech course. A course designed to explain discussion as a means to better understanding of human affairs and action in human affairs and to develop attitudes and skills which enable people to participate in discussion competently. A practical course in actual field work in the off-campus speaking situation. A study of group leadership.



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